NASA
National Aeronautics and Space Administration

25
Twenty-fifth Anniversary
1958-1983

The Evolution of the NASA Organization

NOVEMBER 1983

Prepared by: Office of Management
Management Support Office
Management Processes Branch

NASA
National Aeronautics and Space Administration

NASA ADMINISTRATORS 1958 - 1983

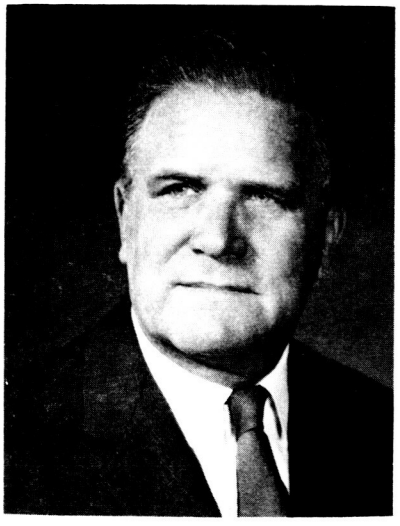
25th Anniversary
1958-1983

James M. Beggs
Administrator

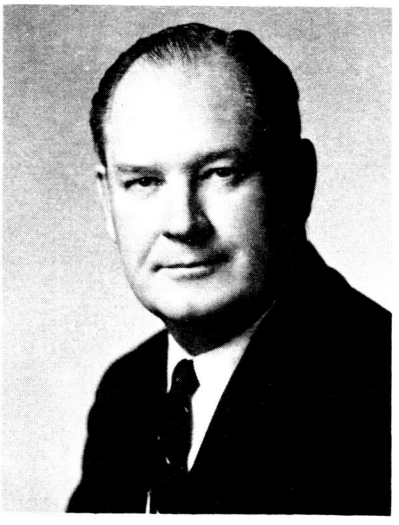
Dr. Robert A. Frosch
1977 - 1981

Dr. James C. Fletcher
1970 - 1977

Dr. Thomas O. Paine
1968 - 1970



James E. Webb
1961 - 1968



Dr. T. Keith Glennan
1958 - 1961

Preface

This document broadly describes the evolution of the NASA organization over the last twenty-five years. It depicts the changing relationships among Headquarters offices and field centers as the Agency responded to national priorities and emerging technical requirements. These changes provide a broad organizational perspective against which the past can be assessed and future organizational alternatives considered.

The document is organized into two chapters. Chapter I provides an overview of organizational trends and issues. Chapter II is a chronology summarizing organizational changes since 1958, the year NASA was established. A detailed picture of all the changes that occurred over those years is available as supplementary material from Code NSM.

A more in depth discussion of the numerous management and policy questions that underlie the information presented can be obtained by contacting the NASA History Office. Two existing publications providing this background are Robert L. Rosholt's *An Administrative History of NASA, 1958-1963* (NASA SP-4101), 1966, and Arnold S. Levine's *Managing NASA in the Apollo Era* (NASA SP-4102), 1982.

The "Evolution of the NASA Organization" will be updated following major Agency reorganizations. Questions and suggestions regarding content can be addressed to Code NSM/Management Processes Branch. This is a controlled handbook with limited distribution; additional copies can be obtained by a written request to Code NSM.

Richard G. Mulligan
Chief, Management Processes Branch
Management Support Office
Office of Management

Contents

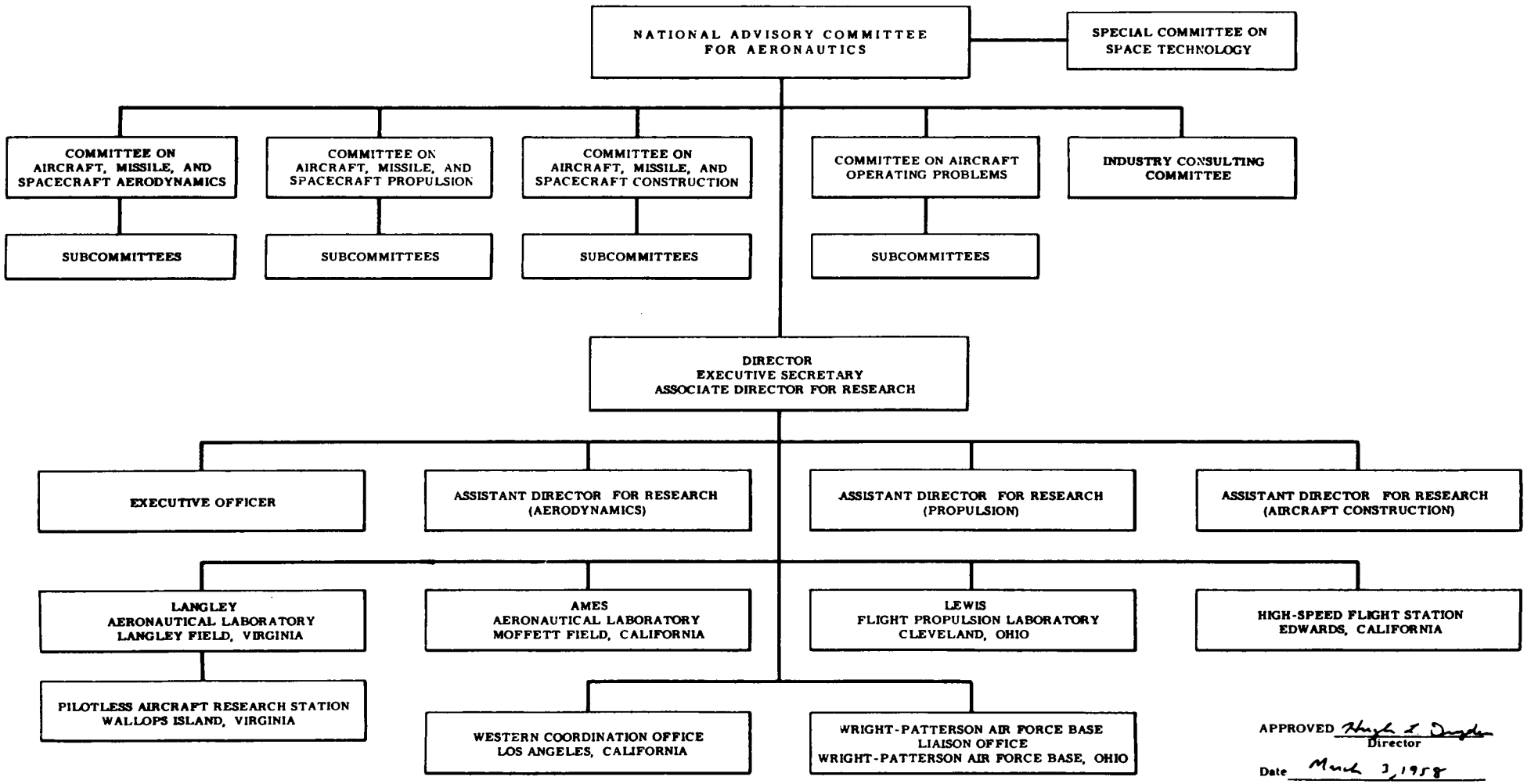
Summary

Over the twenty-five year history of NASA, several organizational issues have consistently posed challenging management questions for the Agency's leadership. Essentially a decentralized organization, NASA has been an Agency whose philosophy and dynamic mission have driven the need for its field centers and their project managers to be given as much freedom and autonomy as possible to perform their work. This environment has created for Agency management difficult organizational issues of control, coordination, reporting requirements, and the manner in which information flows between the Agency's managers. How to balance the relationships between program offices, field centers, and institutional management has always been a challenge to NASA management. The relationships between functional and program offices, the best way to organize the Agency-wide management of programs, institutional resources, and people, and the question of planning for the future have all been organizational issues that every NASA Administrator has faced. Each Administrator has addressed these questions differently, subject to a number of external and internal variables, and they have arrived at a variety of solutions. While it appears that the restructuring and reorganization of NASA have been nearly continuous, the dynamic nature of the NASA mission and the importance of its work have created an environment where this ability to adapt has been a critical ingredient for success. Clearly the successes achieved by the Agency throughout its brief history and the nation's significantly expanded aerospace horizons attest to the effectiveness of the management philosophies and organizational arrangements chosen by NASA Administrators over the years. A measure of the extent of organizational change over twenty-five years can be seen by looking at NACA-1958 and NASA-1983 as shown in the next two charts.

Dr. Hugh L. Dryden
March 3, 1958

ORGANIZATION CHART

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

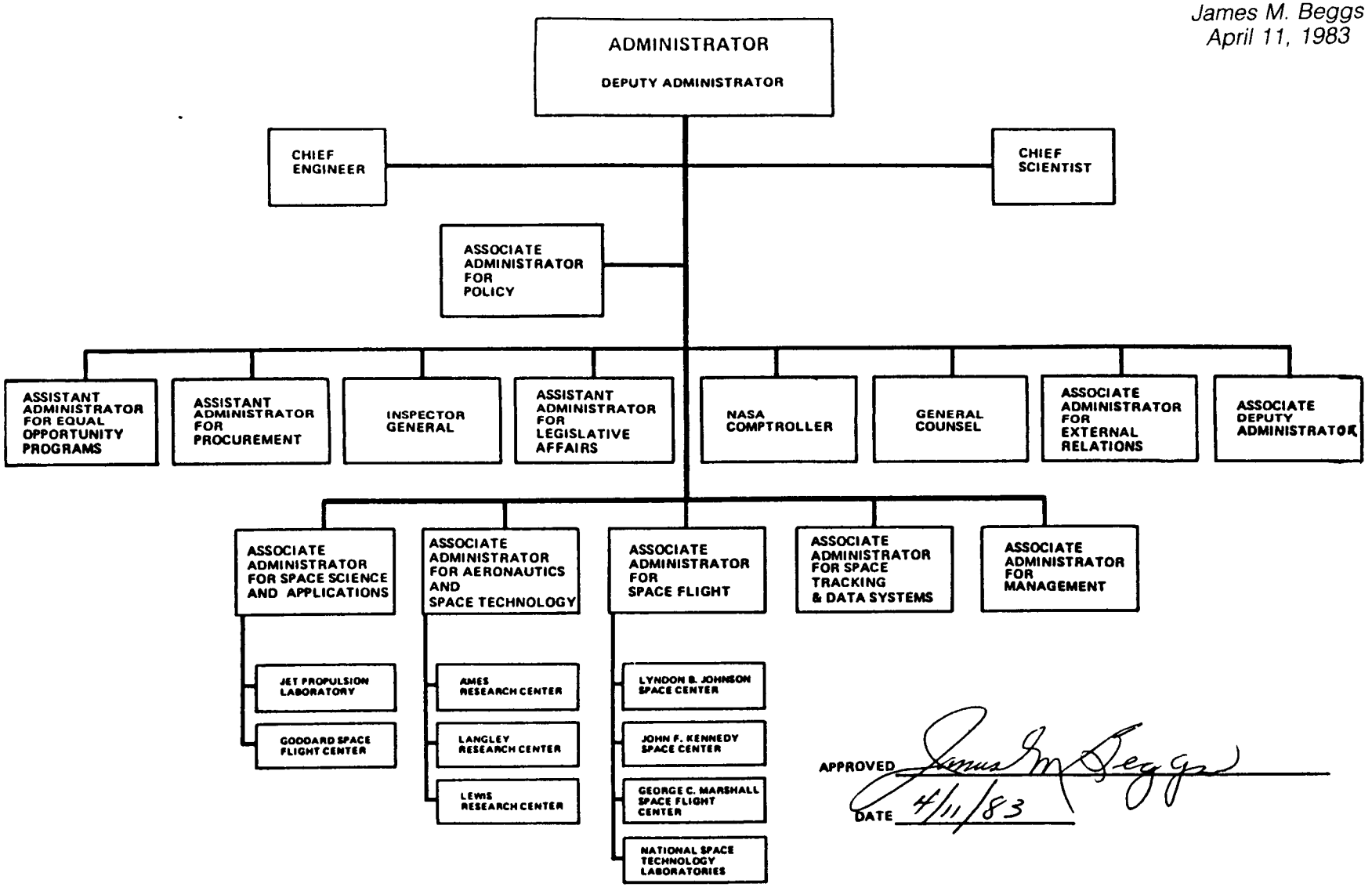


APPROVED Hugh L. Dryden
Director

Date March 3, 1958

NACA

James M. Beggs
April 11, 1983



APPROVED James M Beggs

DATE 4/11/83

Chapter I

Organizational Issues and Trends

The NASA organization has consistently included program, institutional, functional, staff, and administrative offices working with and managing multiple field centers. NASA Administrators have taken different approaches in balancing the roles and responsibilities of these organizational elements. An important objective and continuing management challenge has always been to structure a research and development organization so that creative expertise within its human resource base can be maintained and vitality fostered at the Agency's field installations. This chapter will discuss the general issues and trends in NASA's organization of Headquarters and its organizational components.

Trends in Administrator Control

Under the Space Act of 1958, the Administrator is "responsible for the exercise of all powers and the discharge of all duties of the Administration, and shall have authority and control over all personnel and activities thereof." The Administrator, therefore, has the authority to personally direct all of the Agency's activities and in NASA's history two general trends have emerged. From 1958 to his death in 1965, Dr. Hugh Dryden served as the Agency's Deputy Administrator. The two Administrators during this period, Dr. T. Keith Glennan and Mr. James E. Webb, utilized an Office of the Associate Administrator to direct internal management activities. Functioning much like a general manager, the Associate Administrator handled day-to-day operations while the Administrator and his Deputy concerned themselves more with the formulation of policy and the rigors of representing the Agency before Congress, the White House, clientele groups, and other organizations interested in NASA's activities.

Since 1965, the trend has been for NASA Administrators to direct day-to-day operations through Associate Deputy Administrators and Associate Administrators; each of whom was responsible for managing particular groups of programmatic, institutional, functional, or administrative activities and reporting to the Administrator. In addition, the Office of the Administrator has increased its direction of the Agency's daily operations through supporting staff offices such as the General Counsel, Procurement, External Relations, and Legislative Affairs. In addition to this formal structure, a number of management councils, internal advisory boards, planning groups, and ad hoc task forces have been formed over the years to serve the Administrator and his office. One of the most important of these groups has been the *Policy Review Committee. As currently established, the Policy Review Committee provides for the coordination and integration of planning activities of the NASA program offices. Meeting bi-monthly, the Policy Review Committee includes the Deputy Administrator, Associate Deputy Administrator, the Comptroller, and all the Agency's Associate Administrators and Center Directors. The Administrator also uses a number of advisory committees under the auspices of the NASA Advisory Council to discuss and reach decisions regarding a variety of programmatic and policy issues.

* formerly called the NASA Council.

Adaptability of Program Offices

Program offices, located at Headquarters, have had the operational responsibility for planning, developing, and managing the programs which have enabled the Agency to achieve its aeronautic and space goals. These goals, arising from NASA's unique government, industry, and university team concept, have been by the very nature of the required technology, constantly changing. In a large measure, NASA could not have achieved its scientific and technical successes without an organizational ability to adapt to changing programmatic demands. In this environment, it has been equally critical that the program offices and their organizational structures also be able to adapt smoothly and efficiently.

Throughout the Agency's history, the ability to structurally adapt has existed. Structural changes in the program offices have been required as the scope and content of specific program objectives have been redefined, national priorities have shifted, or new technologies have emerged. In general, these organizational changes have focused on the merger of two previously separate program offices, the division of a single program office, the creation of an entirely new program, the transfer of a particular project responsibility from one program office to another, or the removal or addition of institutional management at the various centers.

Some of the most dynamic programs have been those associated with manned space flight. In 1961, the Office of Space Flight Development was restructured as the Office of Manned Space Flight by absorbing the Office of Launch Vehicle Programs. This change reflected the increased emphasis and pressure for a manned landing on the moon. By 1978, this mission was long completed and the development of the Space Shuttle became the Agency's top priority. With this new project, the Office of Manned Space Flight was retitled the Office of Space Transportation Systems. In 1980, this program office was divided into the Office of Space Transportation Systems and Space Transportation Operations. In 1982, as the end of the Shuttle's developmental flights and the beginning of initial operations approached, the two Shuttle program offices were rejoined. Other program offices that have experienced frequent structural changes are the Office of Space Science and the Office of Space and Terrestrial Applications. Both have utilized similar technology and depending on the Agency's program goals, priorities, and resources have been both merged and separated frequently. In 1964 they were merged; in 1972 they were separated; and in 1982, as a result of program reductions, they were consolidated. The other two program offices, the Office of Aeronautics and Space Technology and the Office of Tracking and Data Acquisition have not had as frequent organizational changes, but have faced several internal reorganizations to accommodate emerging technologies and changing Agency needs.

At the same time that individual program offices have undergone considerable organizational changes, the basic programmatic profile of the Agency has remained relatively stable. The Agency's mission has consistently focused around four or five program offices. NASA's original two program offices were the Office of Space Flight Development and the Office of Aeronautical and Space Research. By 1960, two new program offices were added, the Office of Launch Vehicle Programs and the Office of Life Sciences. With these additions and the elevation of the Tracking and Data

Acquisition function to program office status in 1965, the Agency has carried out its mission within a similar programmatic framework. In 1963, the titles for the managers of these program offices were changed from Directors to Associate Administrators.

The numerous internal changes in the Agency's program offices have occurred within a relatively stable and controlled Agency program environment. Probably one of the most enduring features of NASA's organizational history has been the ability of its program offices and management to adapt to an ever changing environment without losing the effectiveness required to perform its technically complex missions.

Relationship of Program Offices to Field Centers

Field centers perform the actual research, development, testing, and execution of the Agency's aeronautics and astronautics projects assigned to them. Field centers also provide valuable information for the planning of new projects and are the key resource for defining a project's technical content, risks, and appropriate schedules, costs, and performance standards. One of NASA's continuing challenges is how to shape the organization in such a way that the field centers have the institutional management, resources, and freedom to perform the Agency's programs without their becoming too independent and separated from the Agency's priorities and goals. The coordination between field centers, the field and Headquarters offices, and program and institutional management has always been a critical element to the Agency's success.

In the past, this coordination has been sought through a number of different structural relationships. The most common arrangement in the Agency's history has had the field centers report to those program offices for whose projects they are primarily responsible. Within this arrangement, program offices have either reported to the Administrator, an Associate Administrator acting as a general manager, or through Deputy Associate Administrators. In some cases, field centers have reported to two Headquarters' levels, a program office and an office responsible for Agency-wide institutional management. In this arrangement, field centers report to Headquarters program offices regarding programmatic issues and another office concerning institutional questions and resources. At times, field centers have reported directly to an Office of Programs serving as a staff arm of the Administrator. In some cases, field centers have reported directly to the Administrator.

There are a number of organizational and environmental conditions that have governed the selection of one of these structural options. One, is the degree to which a field center's project activities can be closely identified with, and related to, a single program office. When a field center has engaged in projects that are closely aligned with one program office it is easier and often more logical for that field center to report solely to that program office for both institutional and programmatic leadership. For example, during NASA's Apollo program the three flight centers were thought to be more effectively supervised by the Office of Manned Space Flight by virtue of their primary focus on manned space flight activities. However, when field centers conduct projects associated with more than one program office, direct supervision and control by one program office may cause confusion, particularly regarding the priorities of one project over another.

Direct supervision by one program office over a field center with multiple project and program responsibilities has been achieved by having the field center report to the program office for whom they perform the bulk of their program responsibilities. In general, despite having multiple program responsibilities, field centers have been able to trace a large share of their activities to a single Headquarters program office. Careful coordination and communication between the program offices utilizing a center's resources have reduced the confusion and logistical problems that might arise as a result of these multiple program responsibilities.

At times, however, NASA management has felt it necessary to enhance the field center's ability to interact with top Headquarters management and encourage the creative freedom of field centers by having them report directly to an institutional office, center operations group, or even directly to the Administrator. While the program offices continue to supply the general planning, management, and support for a program in this arrangement, the field centers report to another Headquarters office for institutional leadership and resources. The issue to whom the field centers directly report at Headquarters has been a continuing organizational challenge for the Agency. The resolution of this issue has always focused on how to most effectively support the Agency's field installations, the key to fulfilling NASA's mission and goals.

Balance Between Functional and Program Offices

Functional offices are those offices that provide general NASA-wide coordination, assistance, and management direction over specific tasks and activities such as procurement, personnel, or facilities. NASA field center personnel performing these functional activities receive direction and management not only from the Headquarters functional office, but also from the program office or field center organization in which they work. The proper balance between this matrix arrangement, dual reporting requirements, the appropriate level of authority, and influence a functional manager should have over program and project management has also been an important issue in the Agency's reorganization efforts.

NASA's philosophy has been to give the project and program managers as much autonomy and decision-making authority as possible. Within this philosophy, the balance in the relationships and authority of functional office specialists generally located outside the reporting relationships of project managers and Headquarters program offices has always been critical. A balanced matrix structure would allow NASA's program and project managers to control their particular programmatic effort with considerable freedom while providing the functional offices sufficient authority to coordinate, manage, and direct their functional counterparts located at the project and program levels. A matrix structure is generally more complex to manage than simple hierarchical relationships. It creates dual reporting lines and overlapping authority between program and functional offices and can cause confusion. Too much authority in the functional offices may reduce the essential technical freedom and flexibility of the program and project managers. However, too little authority for the functional managers may reduce their effectiveness; whereby the lack of attention to a functional activity may jeopardize the ability of a program or project to succeed. Safety is one

functional area that, if left unattended, could reduce a program's effectiveness or even more seriously, cause a loss of life. The facilities function is another critical activity to a center's ability to perform its mission or be positioned to conduct future projects.

NASA's reorganizations have been sensitive to these issues. Through the years, it has been considered most effective to place most of the functional activities under an office of Administration, Management, or Business Administration. However, some functional activities such as procurement or equal opportunity have been considered more unique or sensitive and generally have directly served the Administrator in a staff role.

Staff Office Evolution

Staff offices are those offices that directly support the Administrator and his Deputy generally in an administrative or non-programmatic area. Staff offices that have continuously supported the Administrator have been those with responsibility for maintaining ongoing relationships with organizations external to the Agency such as the general counsel's office, legislative affairs, and public affairs. Other offices that have played a consistent staff role have been financial and budgetary management, audit and investigations, and other external relations activities with the Department of Defense, the international community, or the Agency's industrial clientele.

Each of NASA's Administrators has arranged these staff functions differently depending on their individual executive needs. During NASA's early history, the Administrator's staff consisted largely of offices that dealt with the legal and external affairs environment. During this period, the budgetary, financial, and resources activities were grouped under an office of Business Administration reporting directly to the Associate Administrator, the Agency's early general manager. From 1967 to 1974, most staff offices did not report directly to the Administrator, but rather reported through an Associate Deputy Administrator, an Associate Administrator for Organization and Management, or a Deputy Associate Administrator. In general, the offices responsible for dealing with organizations external to the Agency have directly supported the Administrator in a staff capacity. At times in the Agency's history, the dissemination of NASA's scientific and technical information has been managed at a similar level. Over the years, the number and type of these staff offices have changed depending on the level and type of personal involvement and the type of activities desired by the Administrator.

Planning and Policy Offices

When NASA was first established in 1958 there existed an Office of Program Planning and Evaluation that reported to the Associate Administrator. Later this office served as a staff office to the Administrator. In NASA's early history, the policy and planning functions were more visible and formally structured than during the later years of the Agency's development. In the early 1960's, NASA worked within a formal long-range planning process, but soon discarded the process as a resources management tool. The original Office of Program Planning and Evaluation was abolished in 1963 and relocated under an Assistant Administrator for Technology Utilization and Policy

Planning. With this reorganization, planning was principally performed by a Policy Planning Board made up of senior NASA officials from Headquarters and field centers, with the Board reporting to the Administrator and Deputy Administrator. The Board was assisted in this effort by the Technology Utilization and Policy Planning group. In 1964 and 1965, NASA utilized a Future Programs Task Group in addition to special studies and planning groups that functioned within the Manned Space Flight and Space Science Applications programs. In 1983, because of the emerging international policy impact of NASA programs, an Office of Associate Administrator for Policy was established.

While there have been Administrators who have had central planning groups to provide an integrated planning and policy focus, a great deal of Agency planning has originated at the field centers and within the program offices. Advanced planning groups have existed at the program level throughout the Agency's history. The decentralized nature of NASA's organization has not generally lent itself to integrated planning, but various groups have formally existed to fulfill this role and support the Administrator and his Deputy. In 1968, the Planning Steering Group and Planning Coordination Steering Group provided such integration. Between 1970 and 1972, when Mr. Werner Von Braun was the Deputy Associate Administrator for Planning, there existed the Office of Plans Integration, the Office of Long Range Plans, the Office of Analysis and Evaluation, and the Office of Policy. By 1974, this formal and centralized planning focus had been replaced and planning was once again organized within advisory groups, management councils, and at the program level.

The nature of the technology base developed and used by the Agency and the complexity of its research and engineering efforts have created an environment whereby NASA's planning efforts are more often predictions of where the state of the art will be at a particular time in a program's history. Long-range plans, as they exist, require constant review and updating. In NASA's history, long-range plans have been developed by offices created specifically for this purpose while intermediate and shorter-range planning have been accomplished more through the budget preparation process or within the program review and management activities. In support of these nearly continuous efforts, the Agency has utilized the knowledge and skills of outside groups, the university community, numerous study committees, task forces, and advisory panels to provide counsel on the Agency's purpose and direction in achieving its programs and goals.

Business Administration to Office of Management

The Office of Business Administration was created in 1958 to accomplish the Agency's primary financial management activities such as accounting and budgeting. This office, with a status equal to the Agency's program offices, performed a number of functional management tasks such as procurement, personnel, security, and safety and reported to the Associate Administrator. At one time or another, the Office of Business Administration has included most of NASA's functional activities and in 1958 the office included an Office of Programs. In 1961, this program office function was relocated in a staff group of the Associate Administrator with the responsibility for management

reporting, resources programming, project review, and facilities coordination. During this period, and up until 1974 when the budgetary and financial management responsibilities of the Agency were placed in the NASA Comptroller's office, the Office of Business Administration and its subsequent designation, the Office of Administration, performed a much larger institutional and functional role than the traditional tasks associated with preparing and managing the budget.

In 1961, the Office of Business Administration was renamed the Office of Administration reporting directly to the Associate Administrator and performing functional tasks such as administrative services, procurement, supply, security, inspections, personnel, and management analyses. In 1967, the office was relocated under the newly formed Office of Organization and Management with the responsibility for integrating an Agency-wide system of resources management and budgeting. In 1974, when the NASA Comptroller was created, the office was placed in a staff position to the Administrator responsible for more traditional budgeting, accounting, and financial management activities. At the time, personnel and health functions were removed and kept within the Office of Organization and Management. In the 1981-1982 reorganization, the remaining functional activities of facilities and equipment and supply management were removed and placed under the Office of Management.

Chapter II

A NASA Organizational Chronology

1958

Under the management of Dr. T. Keith Glennan and Dr. Hugh L. Dryden NASA officially began operations on October 1, 1958. As established, NASA absorbed programs, projects, personnel and installations from exisiting government organizations; most prominently the National Advisory Committee for Aeronautics (NACA). The Agency's earliest management challenges were the absorption of these activities, the initiation of large new programs in both aeronautics and space, and the preparation for the very large buildup of resources and people required for the development of a manned space flight program.

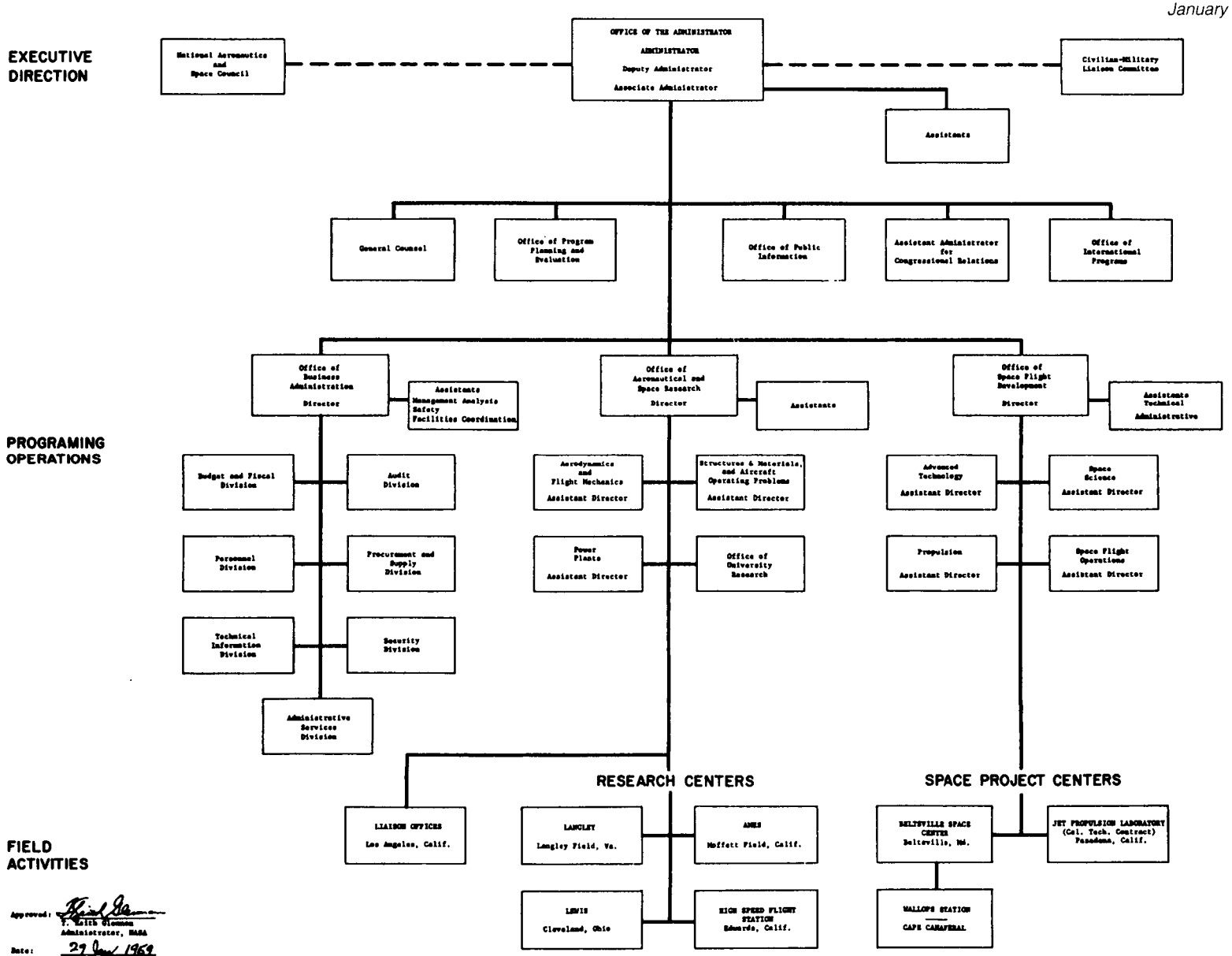
NASA's first official organizational chart emanated from organizational proposals made by the Ad Hoc Committee on NASA Organization chaired by Mr. Ira Abbott and an organizational study performed by the outside consulting firm of McKinsey and Company reporting to Dr. Glennan. Between these two working groups a total of eight proposed and tentative organization charts were discussed prior to the issuance of NASA's first official organizational chart on January 29, 1959.

The major structural components of NASA's first organizational arrangement included the creation of an Associate Administrator position to serve as the general manager of all of the Agency's internal operations. Staff offices included a General Counsel, an Office of Public Information, an Office of International Programs, an Assistant Administrator for Congressional Relations, and an Office of Program Planning and Evaluation to conduct long-range planning. Two other organizational components were created by the Space Act of 1958, the National Aeronautics and Space Council and the Civilian-Military Liaison Committee.

NASA contained two program offices, the Office of Aeronautical and Space Research and the Office of Space Flight Development. The primary administrative and functional office was the Office of Business Administration which not only included budgeting, accounting, and financial management activities, but also the areas of personnel, procurement and supply, technical information, security, and facilities management. A total of eight field installations, designated as either research or space project centers, reported through their respective program offices to the Associate Administrator. In addition to inheriting the existing research activities of NACA, NASA absorbed Project Vanguard from the Department of Defense, projects from the Advanced Research Projects Agency, and all of the non-military activities of the Jet Propulsion Laboratory.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Dr. T. Keith Glennan
January 29, 1959



Approved: T. Keith Glennan
Administrator, NASA

Date: 29 Jan 1959

1959—1960

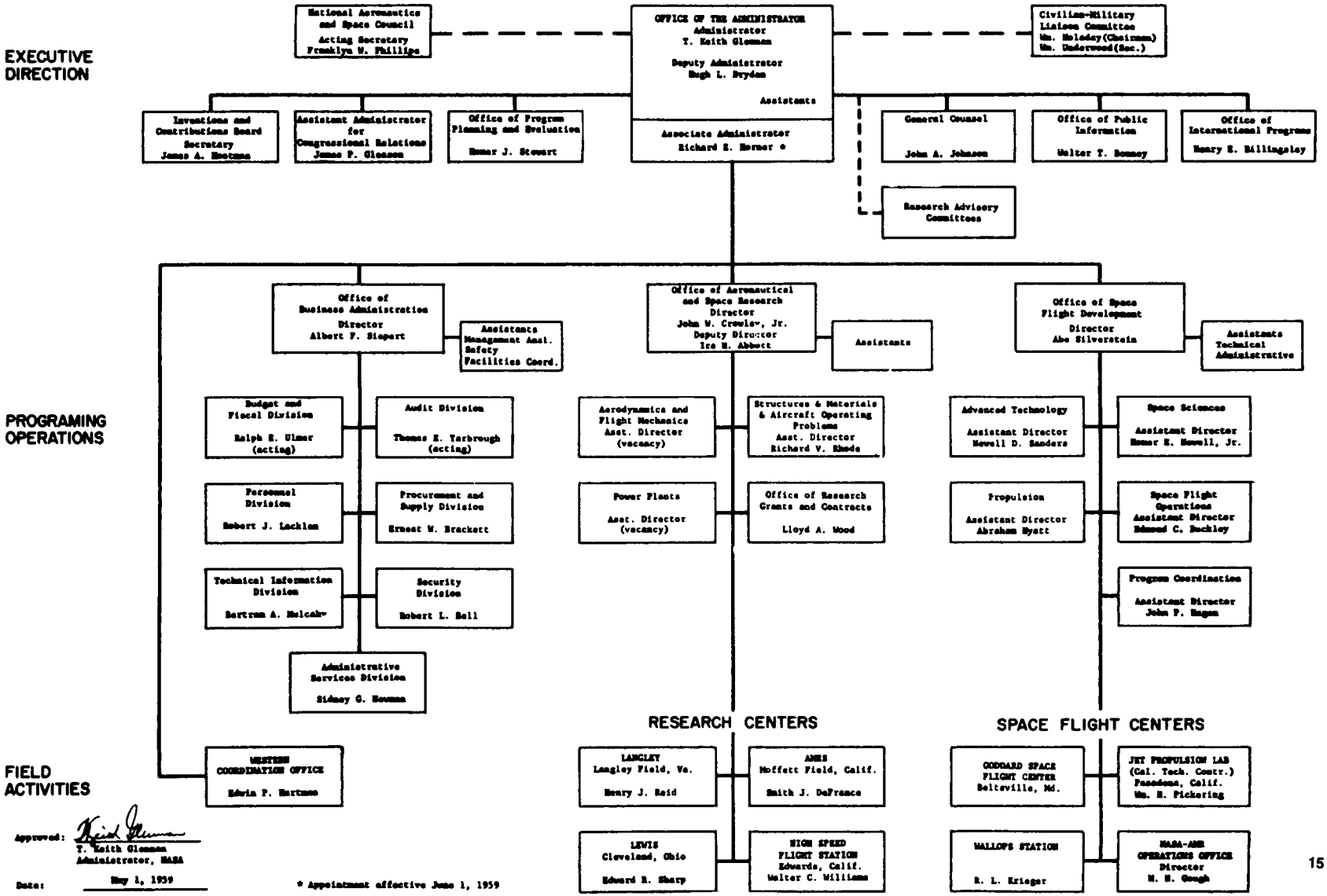
In 1959, there were four organizational changes made to NASA's initial organizational chart and in 1960 three other changes were made. Early in 1959 the staff office of the Inventions and Contributions Board was added along with the Research Advisory Committees. A Program Coordination office was added to the Office of Space Flight Development to coordinate and review the office's various flight activities. In December of 1959, several program office changes were made. Instead of one program office in the area of space flight, two program offices emerge, the Office of Space Flight Programs and the Office of Launch Vehicle Programs. The Office of Aeronautical and Space Research was changed to the Office of Advanced Research Programs. In addition, the Associate Administrator or general manager positioned focused more on NASA's program offices and the Office of Business Administration was clearly separated from the Office of the Administrator. Plans also began for the development of the Goddard Space Flight Center. NASA's field installations continued to report through the program offices to the Associate Administrator.

In 1960, the Army Ballistic Missile Agency's Development Operations Division was transferred to NASA and became the George C. Marshall Space Flight Center. The transfer included the Launch Operations Directorate which later became the John F. Kennedy Space Center.

Also, the Office of Life Sciences Programs was created in 1960 to increase NASA's participation in basic biological, medical, and behavioral sciences research. In addition to these changes, an Office for United Nations Conference was established on an ad hoc basis to support the Administrator and Deputy Administrator's participation in an international conference on the peaceful uses of outer space. NASA again contracted the McKinsey and Company to work with the Advisory Committee in Organization in performing an organizational analysis. The report generated by this study activity became known as the Kimpton Report after the Committee's Chairman, Lawrence Kimpton. The study's conclusions and recommendations contributed to the drive for the 1961 reorganization.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Dr. T. Keith Glennan
May 1, 1959



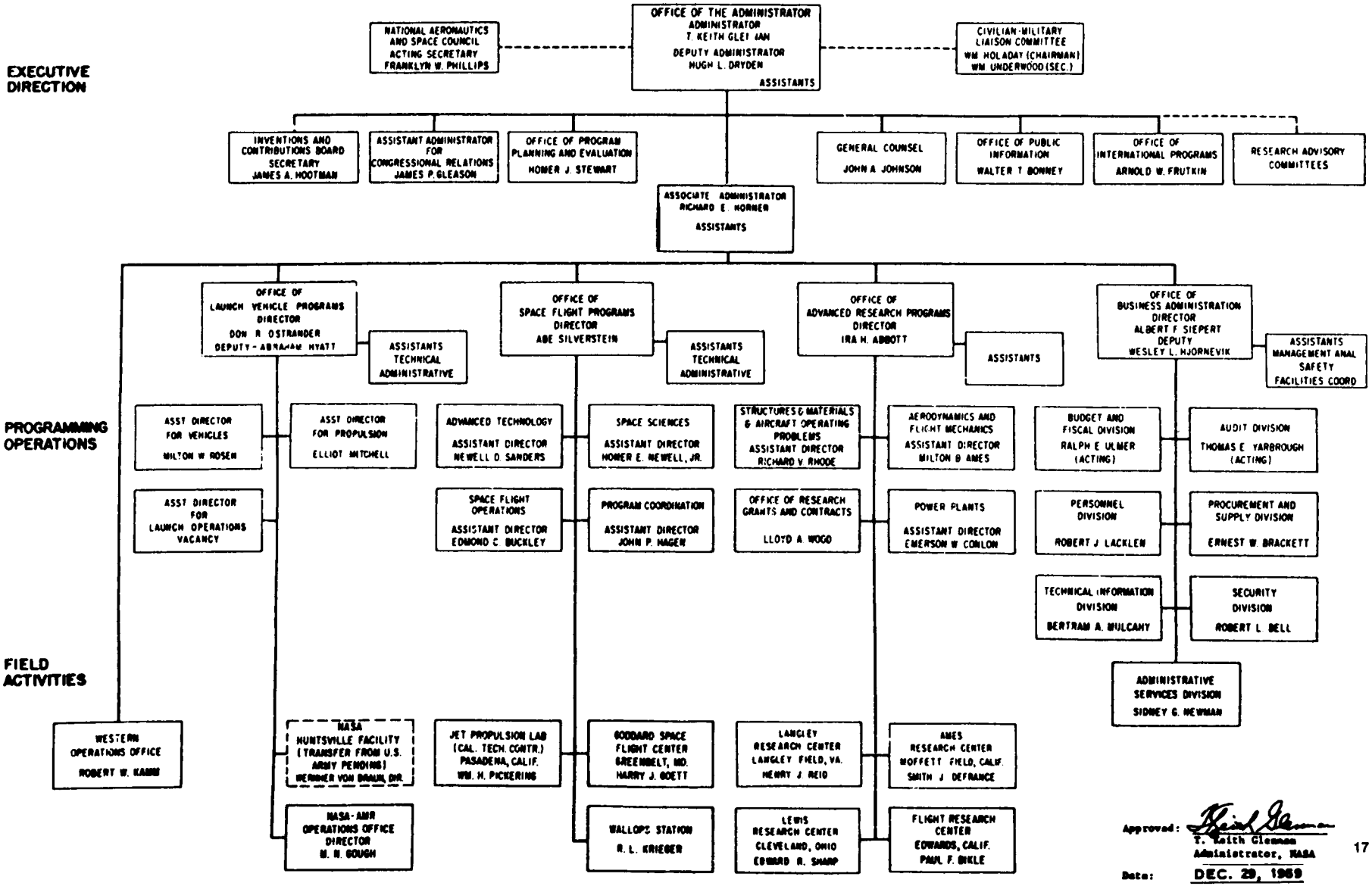
Approved: T. Keith Glennan
Administrator, NASA

Date: May 1, 1959

* Appointment effective June 1, 1959

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Dr. T. Keith Glennan
December 29, 1959

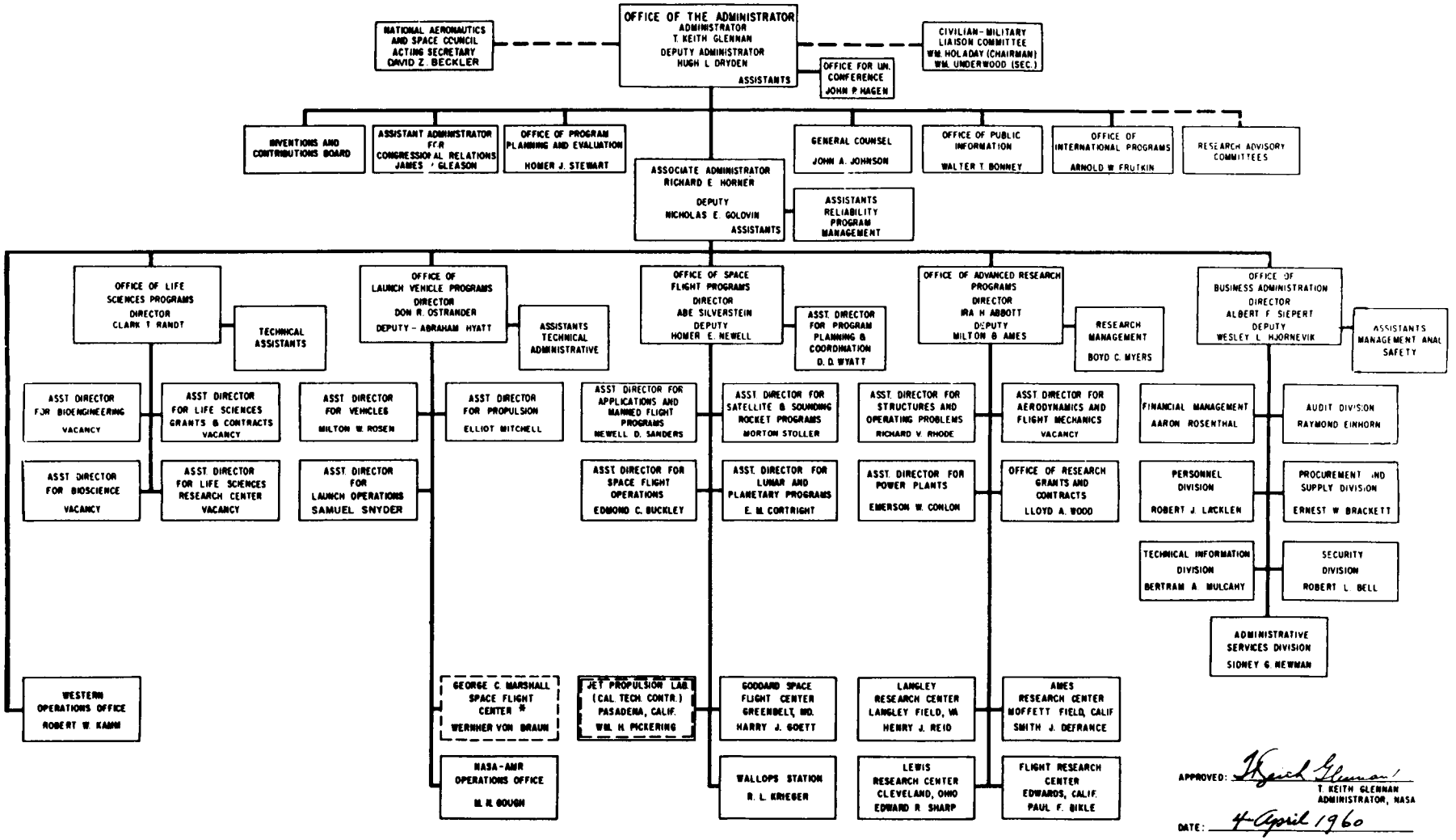


Approved: T. Keith Glennan
T. Keith Glennan
Administrator, NASA

Date: DEC. 29, 1959

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Dr. T. Keith Glennan
April 4, 1960



* TRANSFER FROM U.S. ARMY PENDING. TO BE EFFECTIVE JULY 1, 1960.

APPROVED: T. Keith Glennan
T. KEITH GLENNAN
ADMINISTRATOR, NASA

DATE: 4 April 1960

SUPERSEDES CHART DATED FEBRUARY 7, 1960

1961

President Kennedy announced as a national goal a manned landing on the moon before the end of the decade. Mr. James E. Webb became NASA's second Administrator. There were a number of organizational changes made in 1961. Three separate organizational charts were created; one authorized by Dr. Glennan and two by Mr. Webb. The Glennan reorganization added responsibility for the Office of Program Analysis and Control and the Office of Reliability and Systems Analysis to the Associate Administrator. In addition, the Associate Administrator created an Assistant Administrator for Programs and one for Resources. These changes were made to strengthen the Associate Administrator's role in controlling NASA's overall program. In addition, a new program office, was created; the Office of Technical Information and Educational Programs, to provide a higher focus to the Space Act's requirement that NASA "provide for the widest practicable and appropriate dissemination of information concerning its activities." The functional Office of Research Grants and Contracts was added to the Office of Business Administration.

Mr. Webb authorized two reorganizations in his first year as the Agency's Administrator. The first reorgnization created the Office of Programs and renamed the Office of Business Administration the Office of Administration. Both offices reported to the Office of the Associate Administrator. The Office of Programs altered the relationship between the field centers and NASA Headquarters. Rather than the field centers reporting through the program offices for both program and institutional management, the field centers now reported and looked to NASA's general management or Associate Administrator for their resources. While the field centers continued to receive program direction from their respective program office, they no longer were subordinate to the program Associate Administrators. The Office of Programs had the responsibility for integrating NASA's program planning, facilities coordination, management reporting, resources programming, and project reviews. The renamed Office of Business Administration maintained its functional responsibilities, but now it reported to the Associate Administrator rather than serving as a staff office to the Administrator.

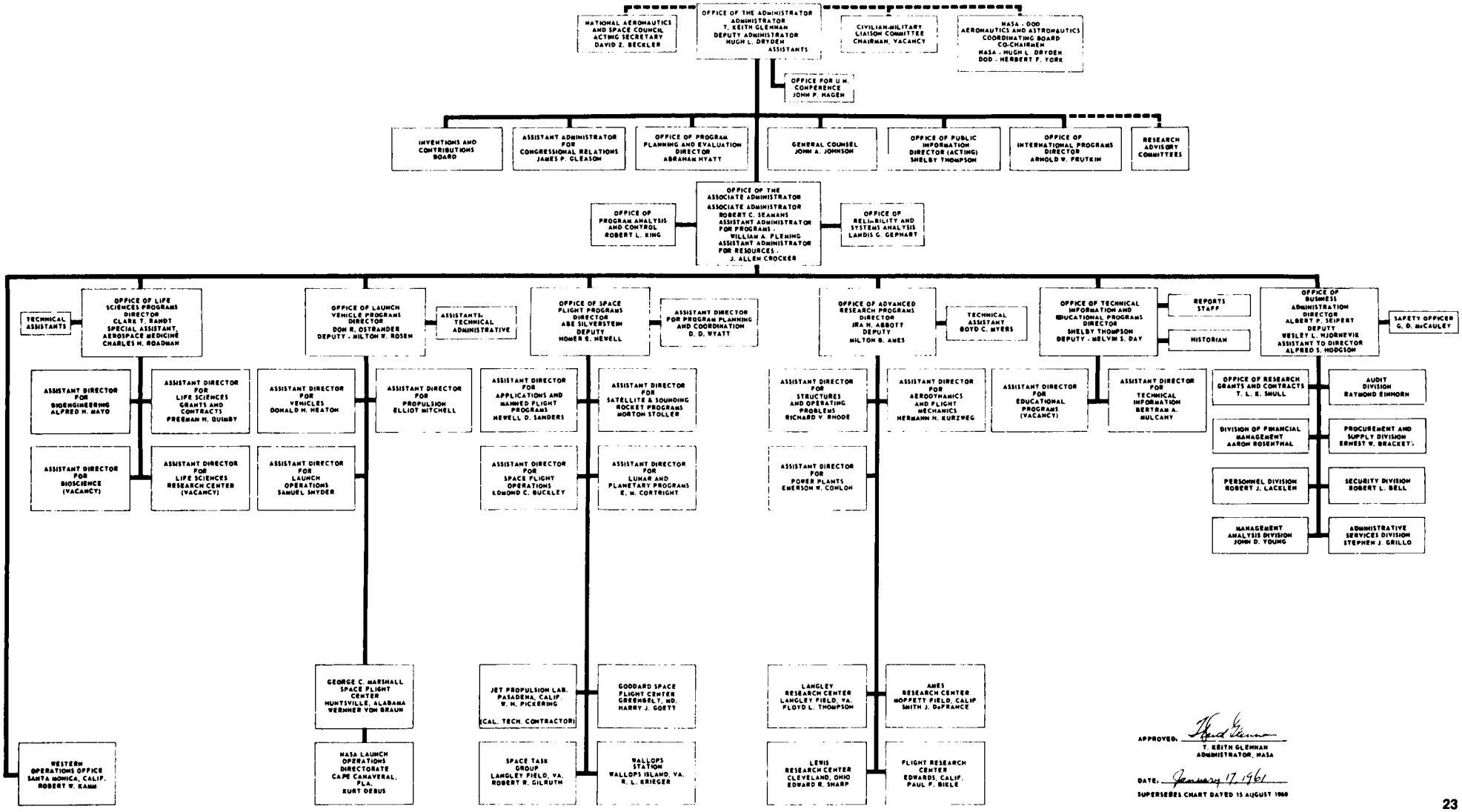
Several major changes occurred during Mr. Webb's second reorganization of 1961. The Agency's four existing program offices, Advanced Research Programs, Space Flight Programs, Launch Vehicle Programs, and Life Sciences Programs were abolished and four new program offices were established. These new offices were named Advanced Research and Technology, Space Sciences, Manned Space Flight, and Applications. In addition, an Agency-wide support office for Tracking and Data Acquisition was created. The program office of Technical Information and Educational Programs which had reported to the Associate Administrator was realigned with the Office of Public Information and formed the Office of Public Affairs as a staff office to the

Administrator. The Office of Research Grants and Contracts previously located by Dr. Glennan in the Office of Business Administration was placed in the Office of Space Sciences. The position of Chief Scientist appeared for the first time and was also placed in this program office. The Office of Congressional Relations became the Office of Legislative Affairs and the Secretariat function was renamed the Office of the Executive Assistant.

Other developments in 1961 included the decision to build the Manned Spacecraft Center in Houston, Texas. NASA also acquired an unused government manufacturing facility in Michoud, Louisiana and it established a testing facility in Mississippi. Additionally, the Agency selected Cape Canaveral as its launch facilities for manned space flight. With these acquisitions, NASA now had plans for a manned spacecraft control center, as well as facilities for vehicle preparation, engine testing, and launching.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Dr. T. Keith Glennan
January 17, 1961



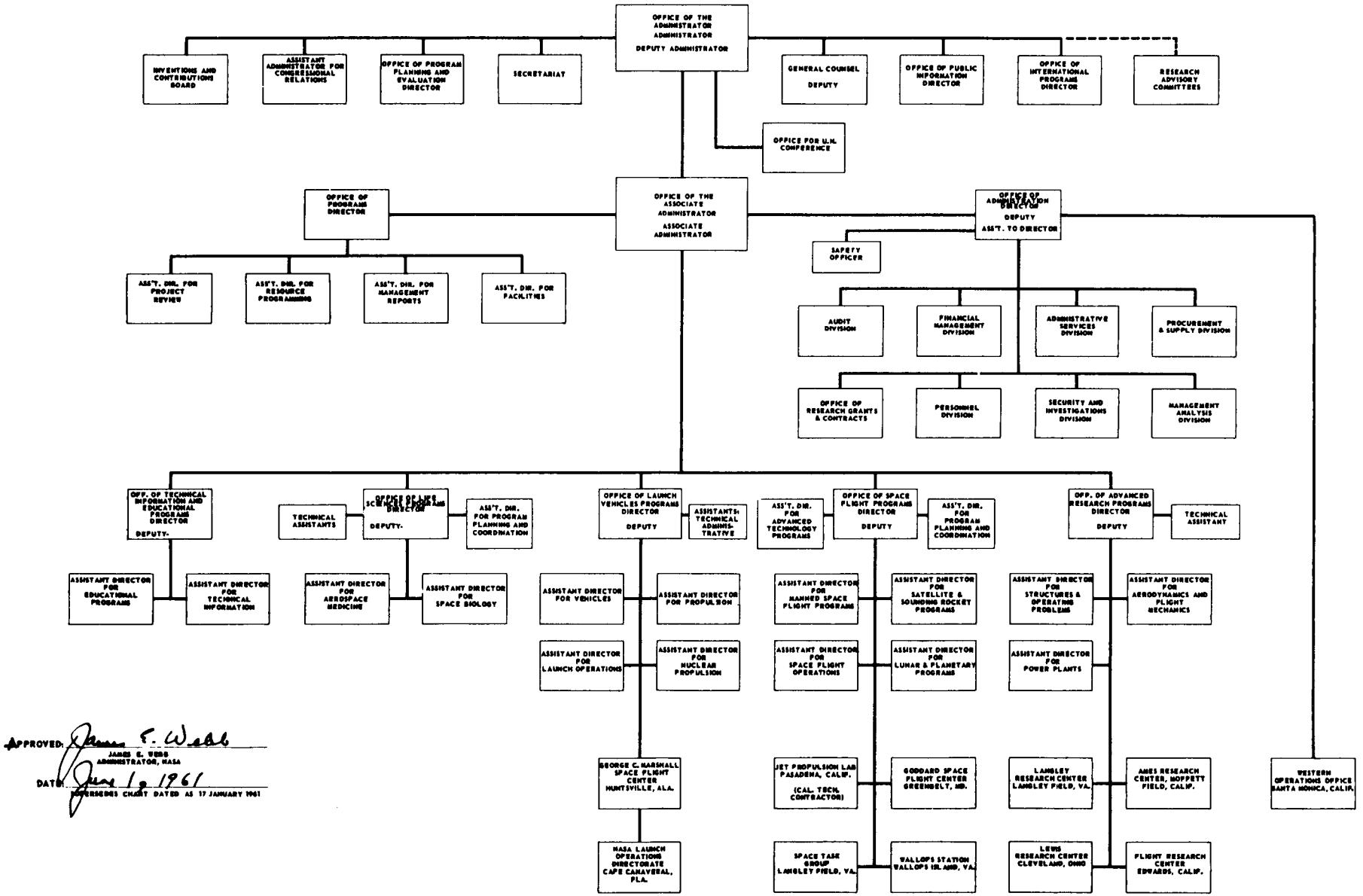
APPROVED: T. Keith Glennan
T. KEITH GLENNAN
ADMINISTRATOR, NASA

DATE: January 17, 1961

SUPERSEDES CHART DATED 15 AUGUST 1960

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

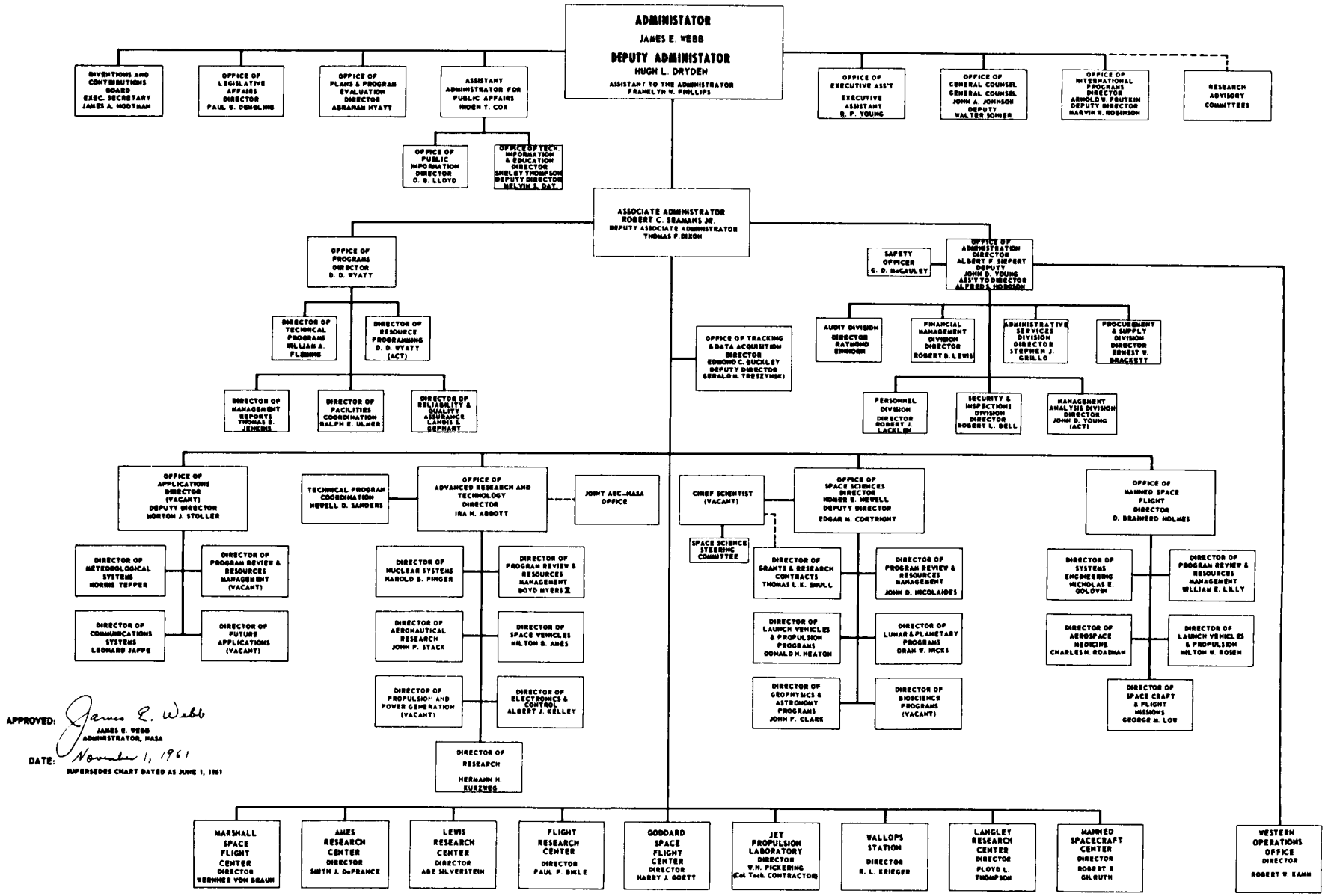
James E. Webb
June 1, 1961



APPROVED: James E. Webb
JAMES E. WEBB
ADMINISTRATOR, NASA
DATE: June 1, 1961
SUPERSEDES CHART DATED AS 17 JANUARY 1961

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

James E. Webb
November 1, 1961



APPROVED: James E. Webb
JAMES E. WEBB
ADMINISTRATOR, NASA

DATE: November 1, 1961

SUPERSEDES CHART DATED AS JUNE 1, 1961

1962–1963

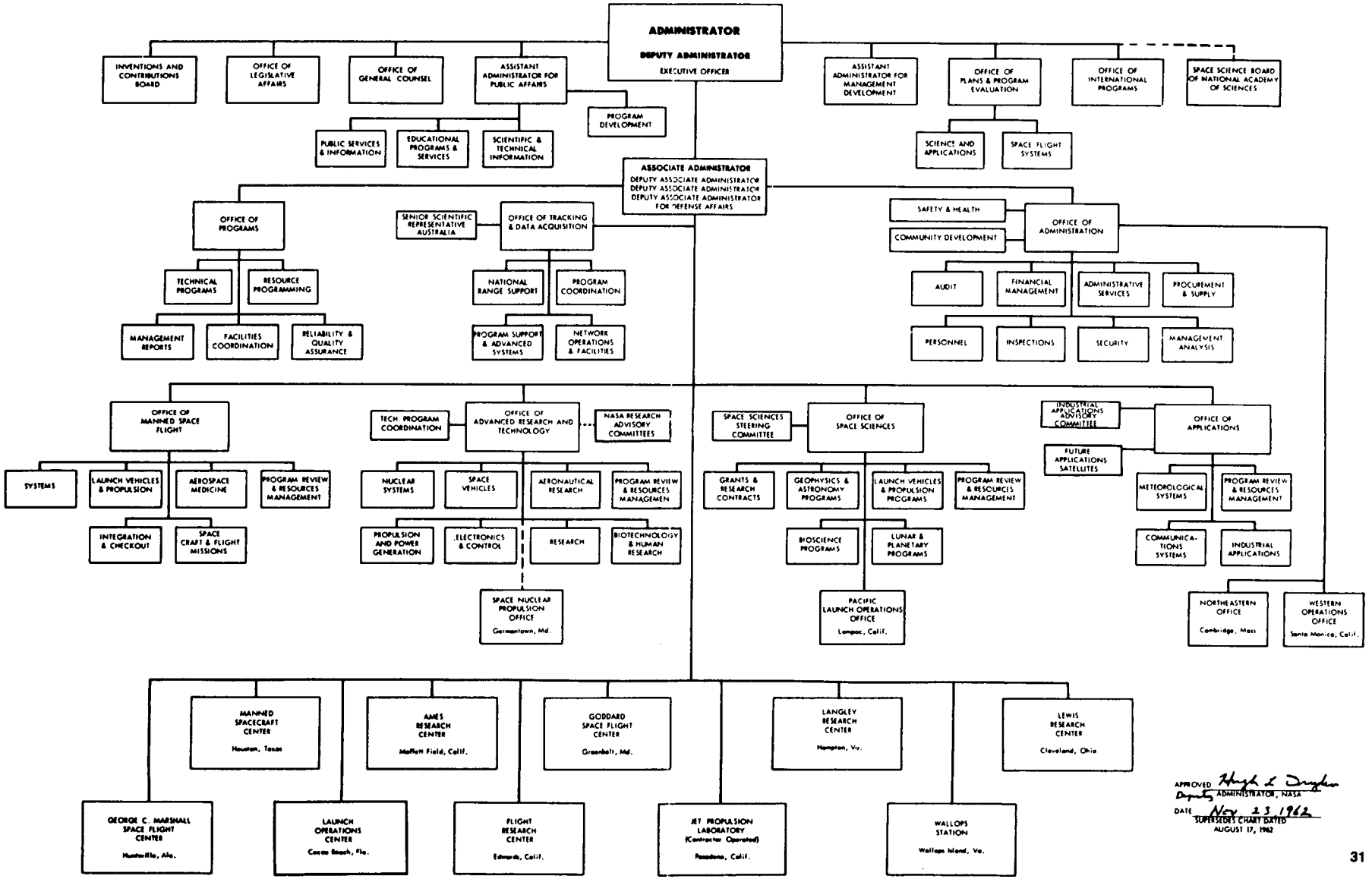
Four Deputy Associate Administrators were appointed in 1962. Two of the four were responsible for the field centers. Field centers were divided into two distinct groups, manned space flight and non-manned space flight. A Deputy Associate Administrator for Defense Affairs was also appointed to improve NASA's overall relationship with the Department of Defense. The fourth Deputy Associate Administrator managed Industry Affairs. The Procurement Division was removed from the Office of Administration and placed in the Industry Affairs Office. However, Headquarters Procurement remained in the Office of Administration.

A larger reorganization effort occurred in 1963 which returned the institutional management and control of the centers to the program offices. This new arrangement was similar to the organizational structure present in 1961. This change recombined both program and institutional management of the field centers into the program offices. The program office that field centers would report to was determined by the primary program activities the centers conducted. Also, the Office of Applications was merged with the Office of Space Sciences creating the Office for Space Sciences and Applications. The titles of the managers of these program offices changed from Directors to Associate Administrators. However, the manager of the Tracking and Data Acquisition office remained a Director and served as a staff arm of the Associate Administrator with responsibility for coordinating these support activities with the program Associate Administrators.

Two functions were added to the new Deputy Associate Administrator for Industry Affairs, the Reliability and Quality Assurance Division from the Office of Programs, and the Inventions and Contributions Board transferred from its staff position to the Administrator. The Office of Programs was also renamed the Office of Programming. Several changes were also made in the staff offices of the Administrator. The Office of Program Planning and Evaluation, in existence since 1958, was abolished. A Policy Planning Board consisting of senior NASA officials from Headquarters and the field centers was established. It received assistance in its planning and policy formulation activities from a new staff office, Technology Utilization and Policy Planning. A new staff office was created to act as liaison with the Space Science Board of the National Academy of Sciences. In addition, on November 29, 1963, President Johnson signed an Executive Order renaming the United States facilities at Cape Canaveral the John F. Kennedy Space Center. On December 20, 1963, Administrator James Webb redesignated NASA's Launch Operations Center the John F. Kennedy Space Center, NASA.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Dr. Hugh L. Dryden
November 23, 1962

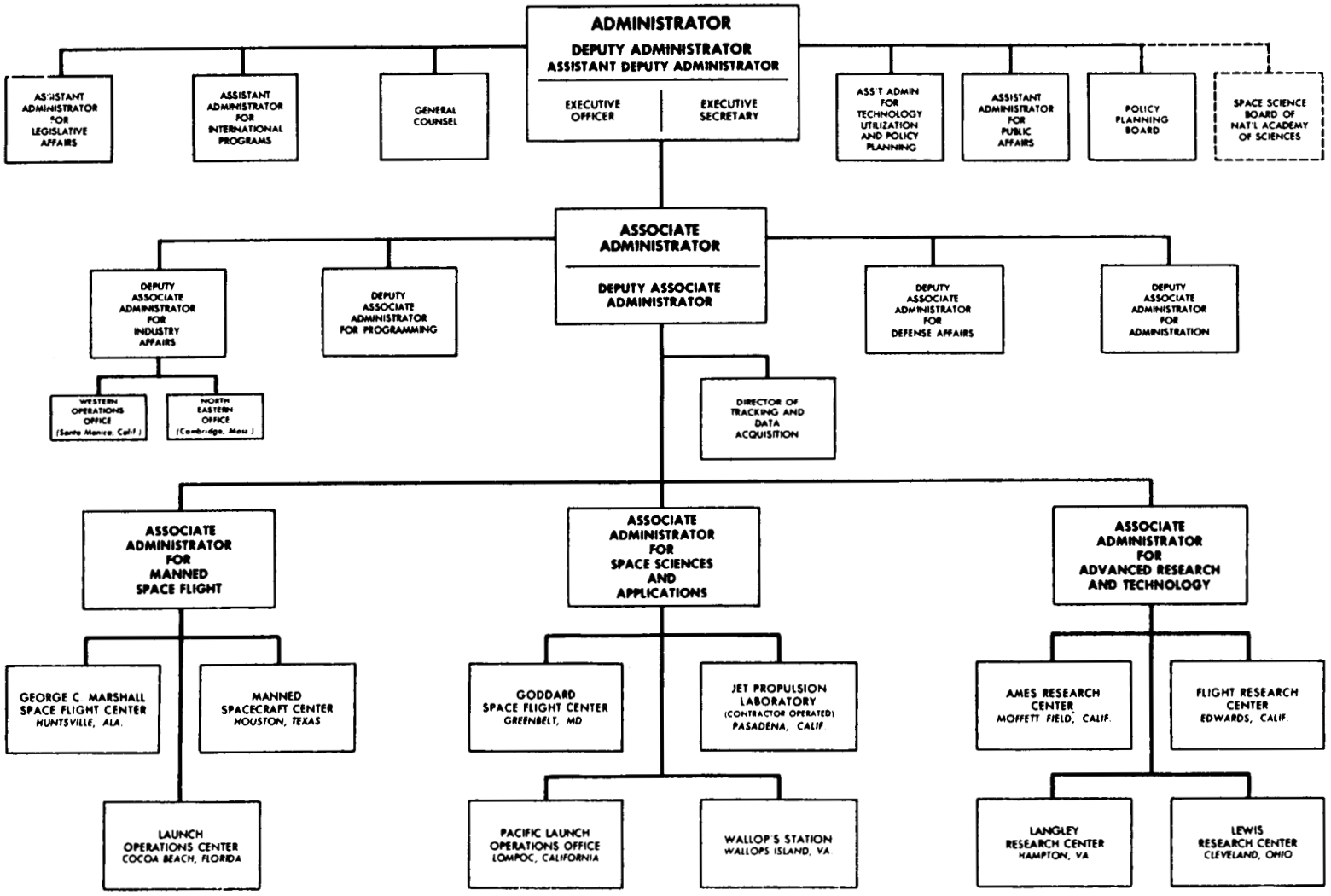


APPROVED Hugh L Dryden
Deputy ADMINISTRATOR, NASA
DATE Nov 23 1962
SUPERSEDES CHART DATED AUGUST 17, 1962

Source: Administrative History of NASA, 1958-1963, Robert L. Rosholt

ORGANIZATION EFFECTIVE NOVEMBER 1, 1963

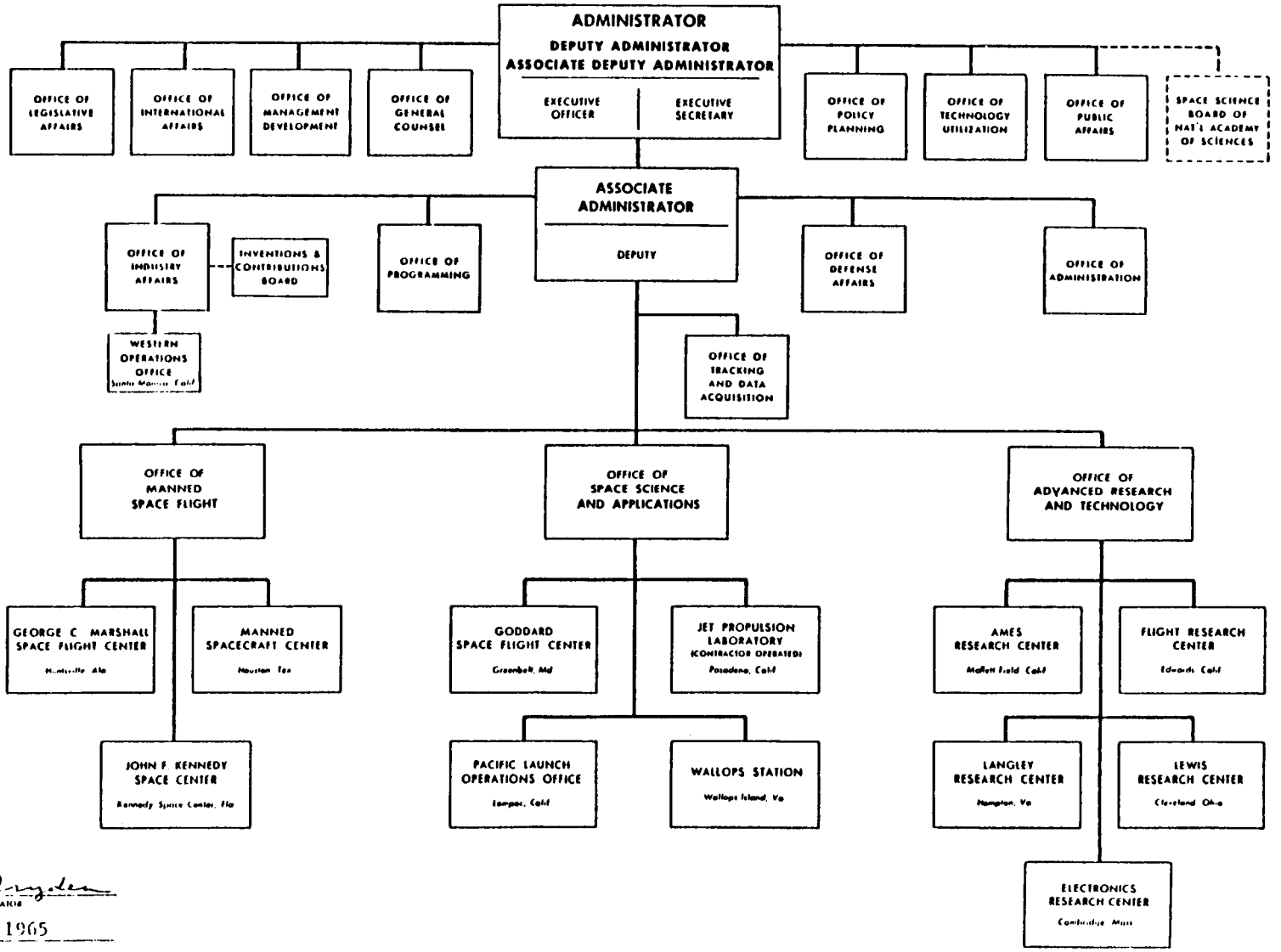
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



1964—1965

In 1964, the Office of the Administrator was created with both an Executive Officer and Executive Secretary to support increased activity by the Administrator and his Deputy in the daily operational affairs of the Agency. In addition, a Deputy Associate Administrator within the Office of the Associate Administrator was created to handle procurement matters and liaison activities with the General Accounting Office. In 1965, enhancements to the Administrators capacity to oversee operational matters continued with the addition of two staff offices; the Office of Management Development and the Office of Policy Planning. The Associate Administrator with his five Deputy Associate Administrators now served more of a supporting role to the Administrator's management of the Agency. The Inventions and Contributions Board became a staff arm of the Office of Industry Affairs and the head of the Office of Tracking and Data Acquisitions was given Associate Administrator status.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



APPROVED: Hugh L. Dryden
Deputy ADMINISTRATOR

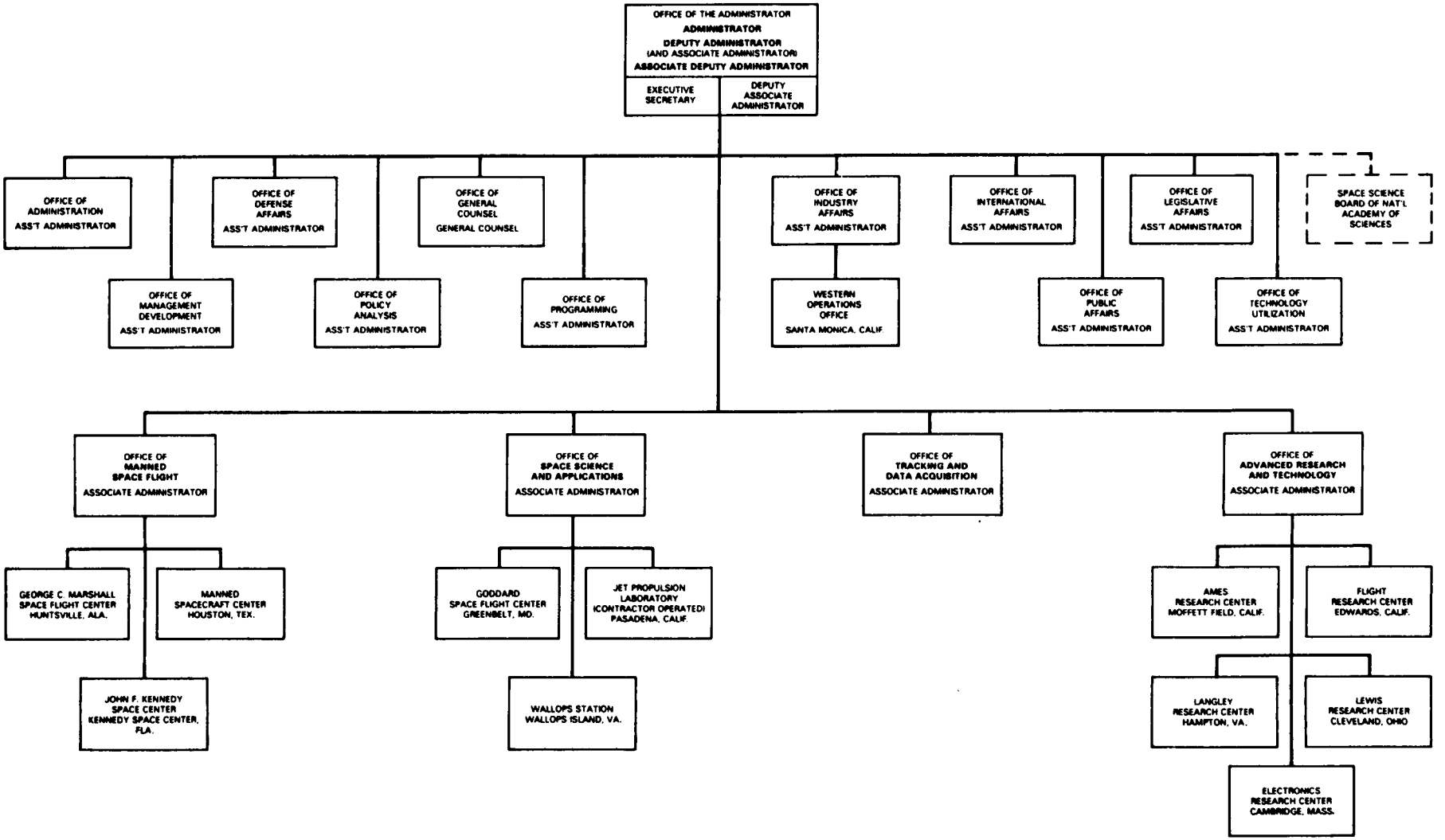
EFFECTIVE DATE: September 7, 1965
(Supersedes chart dated Dec. 18, 1964)

1966

The Associate Administrator, Dr. Robert Seamans, Jr. was appointed Deputy Administrator following the death of Dr. Hugh L. Dryden in 1965. The Associate Administrator position and the general manager concept was replaced by a stronger Office of the Administrator with an Associate Deputy Administrator and a Deputy Associate Administrator to support him. As a result, all the program and functional offices reported directly to the Office of the Administrator and, with the exception of the General Counsel, were managed by Assistant Administrators. Field centers continue to report to their respective program office for program direction and institutional support. All offices that previously served as staff support to the Associate Administrator position were now staff offices to the Administrator. In addition, the Office of Tracking and Data Acquisition was removed as a staff arm to the Associate Administrator and given full program office status. The Office of Policy Planning was renamed the Office of Policy Analysis.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Source: *Managing NASA in the Apollo ERA*, Arnold S. Levine



1967–1968

1967 was a turbulent year for the Agency. NASA experienced budget reductions, criticism of its personnel management by the Civil Service Commission, and a General Accounting Office investigation of its support services contracting practices. The Gemini program was completed, but tragedy struck the beginning of the Apollo program. On January 27, the first three man Apollo crew died on the launch pad when a fire swept through the Apollo spacecraft. The Apollo 204 Review Board chaired by the Director of Langley Research Center, Floyd Thompson, failed to pinpoint the exact source of ignition, but did identify a number of engineering and design defects in the spacecraft. In August 1967, Congress established the Aerospace Safety Advisory Panel to review safety studies and operations plans and advise the Administrator with respect to the hazards of proposed or existing facilities.

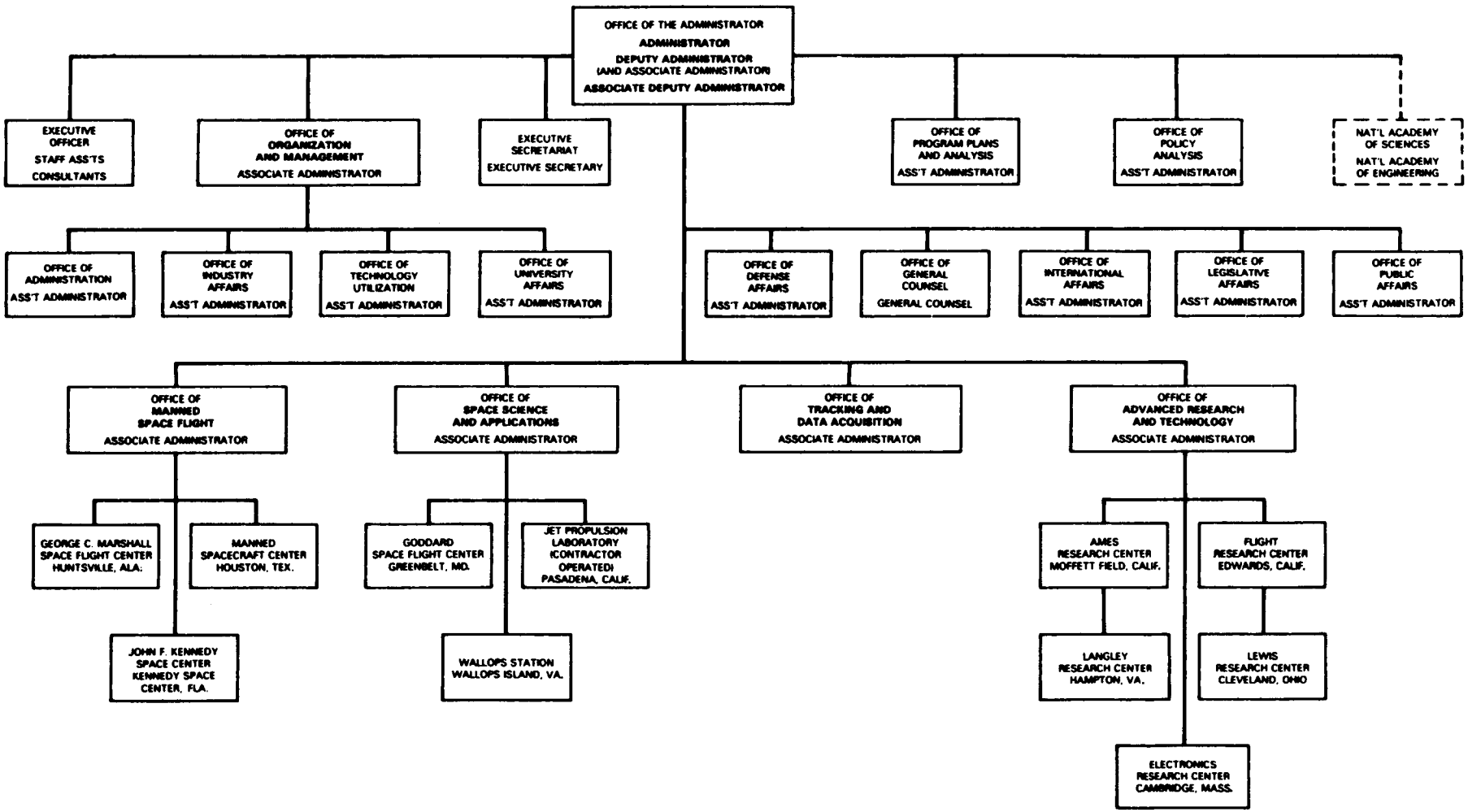
Numerous organizational changes were made in 1967 and 1968. One month prior to the Apollo fire, a management task force chaired by Harold Finger was established to perform a NASA organizational analysis. As a result of this study, an Office of Organization and Management was formed and Mr. Finger was selected as its first Associate Administrator. A number of the functional responsibilities once performed by staff offices to the Administrator were relocated into this new office. Those staff offices transferred were the offices of Administration, Industry Affairs, Special Contracts Negotiation and Review, Technology Utilization, and University Affairs, each managed by an Assistant Administrator. The Office of Administration was responsible for performing budgetary and financial management activities, and providing an Agency-wide focus for resources management; including divisions for Review and Audits, Inspections, and Headquarters Administration.

The Administrator further reduced his direct span of control by placing the Office of DOD and Interagency Affairs, International Affairs, Legislative Affairs, and Public Affairs directly under the control of the Associate Deputy Administrator. These offices were also managed by Assistant Administrators. The General Counsel and Office of Management Development remained as staff offices and were joined by a Personnel Management Review Committee, the Aerospace Safety Advisory Panel, an Executive Secretariat, and an Office of Special Assistants and Consultants. Liaison relationships with the National Academies for sciences, engineering, and public administration also appeared in the organizational structure. Field centers continued to report to their respective program Associate Administrators.

March 15, 1967

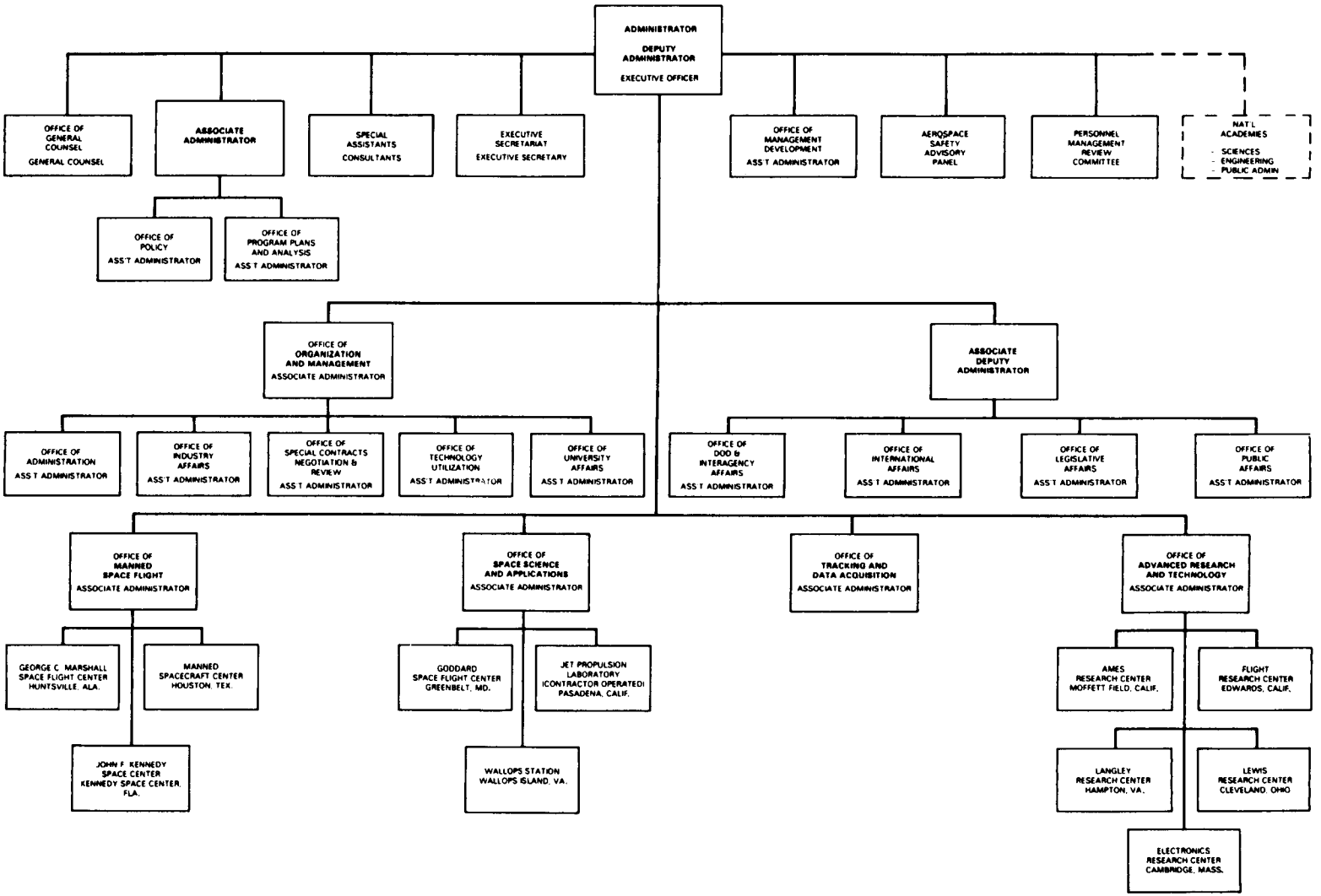
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Source: *Managing NASA in the Apollo ERA*, Arnold S. Levine



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Source: *Managing NASA in the Apollo ERA*, Arnold S. Levine



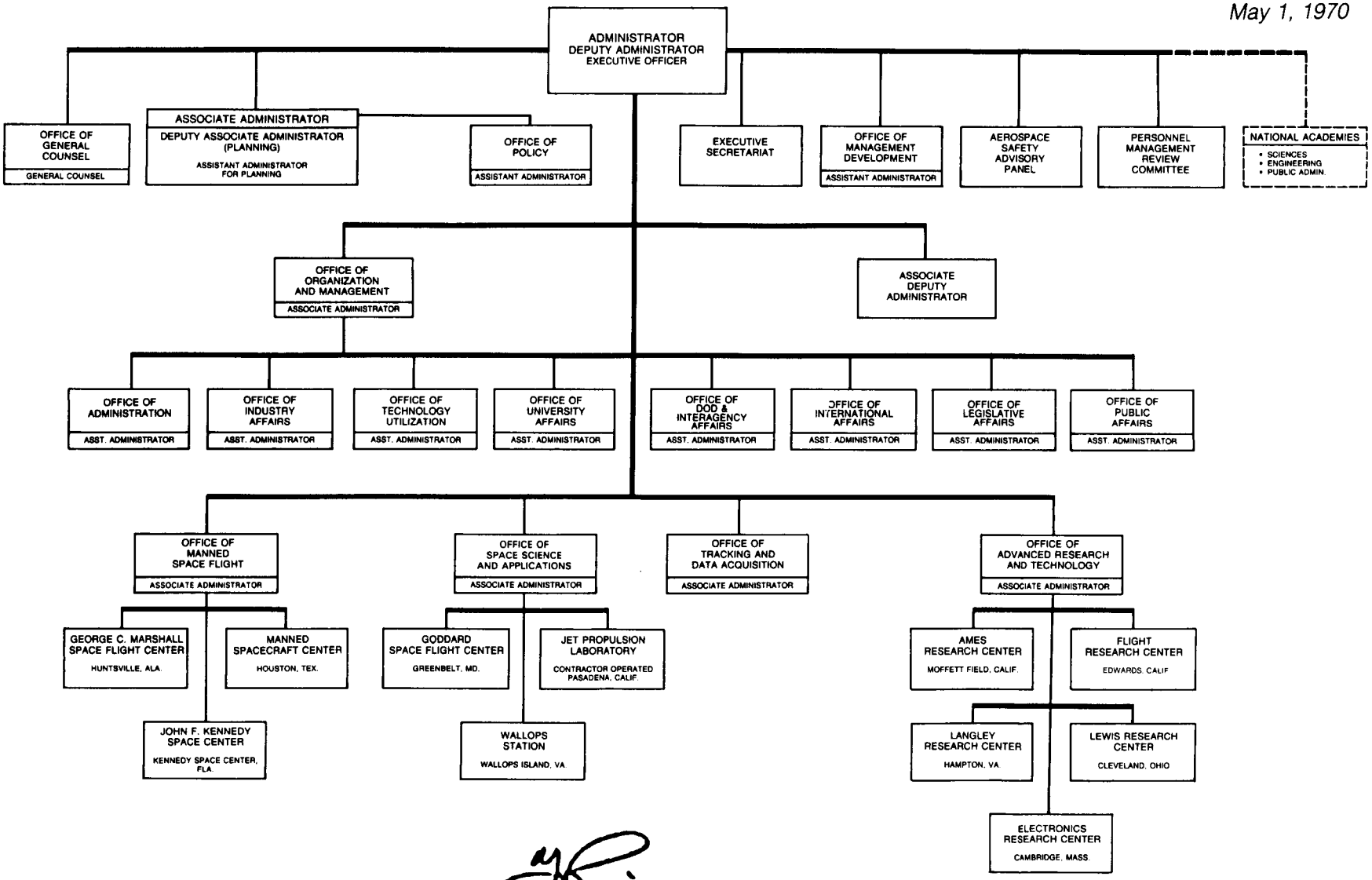
1970–1971

With the landing of Apollo on the moon, July 20, 1969, NASA and the country achieved its goal of walking on the moon by the end of the decade. NASA flew six more missions to the moon, but with the achievement of Apollo 11 and the appointment of Dr. James C. Fletcher as the Agency's Administrator, the reorganizations that occurred in the 1970-1971 period primarily focused on planning for the future. In 1969, task groups had been established to study the feasibility of a manned space station and the development of a Space Shuttle. In addition, Dr. Wernher von Braun was brought to Headquarters to become the Deputy Associate Administrator for Planning. Still placed under an Associate Administrator as a staff office for the Administrator, planning took on a greater emphasis. Under Deputy Associate Administrator von Braun were the offices of Analysis and Evaluation, Plans and Integration, and Long Range Plans.

All other organizational components remained the same. Functional offices were placed either under the Office of Organization and Management or the Associate Deputy Administrator. Staff offices to the Administrator remained unchanged, while field centers continued to report to their primary program office for program direction and institutional support. The Associate Administrator position remained as a reduced staff role with responsibility for its separate offices of Policy and Program Plans and Analysis. This reorganization further simplified the structure of the Administrator's office by having only four program offices and two functional groups reporting.

Dr. Thomas O. Paine
May 1, 1970

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



1 MAY 1970

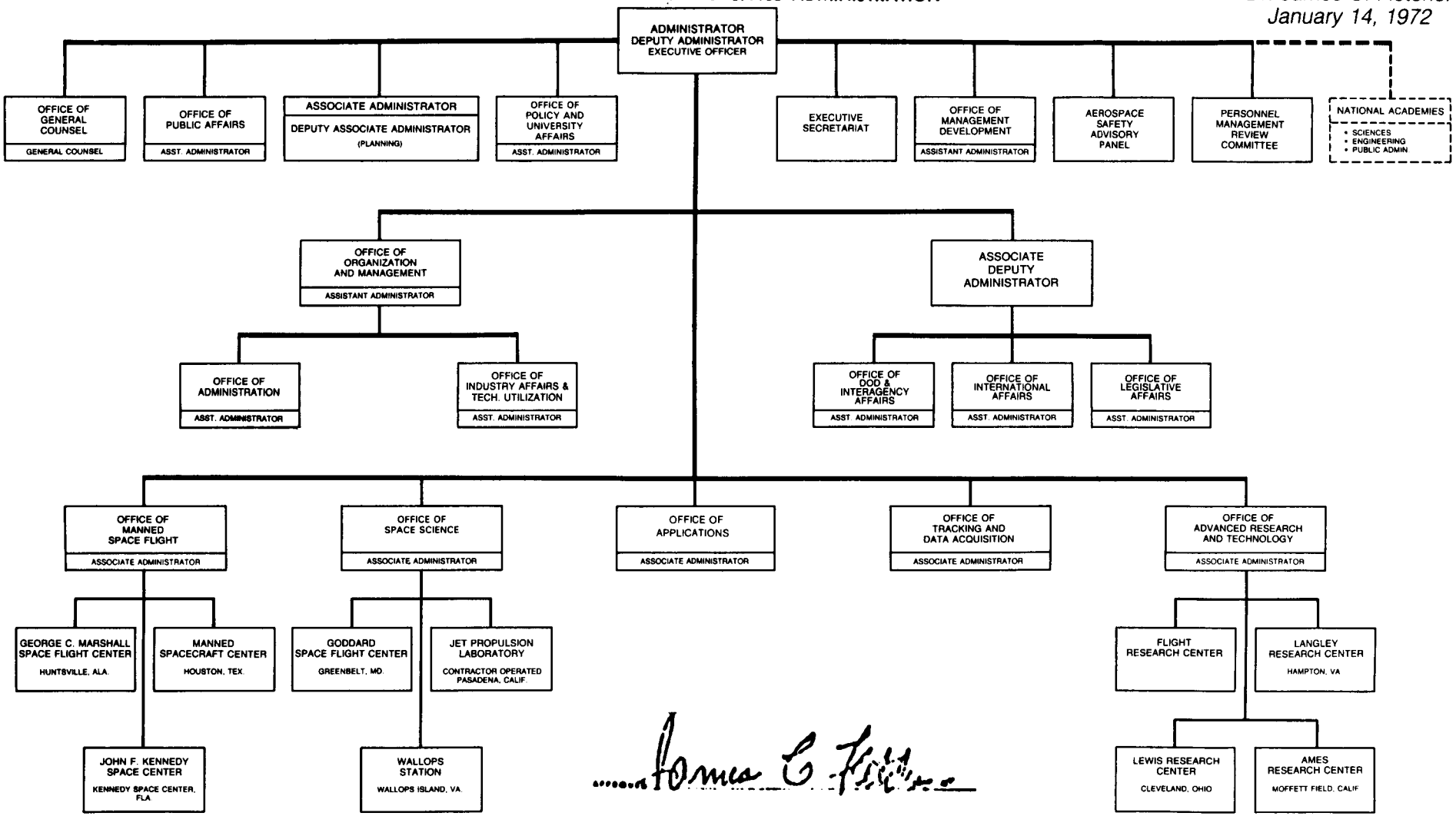
1972

Several organizational changes were made in the functional and staff office groups. While the two functional groups managed by the Office of Organization and Management and the Associate Deputy Administrator continued to report to the Administrator, rearrangements were made within functional specialties. Only two offices reported to the Organization and Management Associate Administrator rather than the previous four offices. Technology Utilization was merged with Industry Affairs and the Office of University Affairs was placed in a staff role with the Office of Policy reporting to the Associate Administrator. The Associate Deputy Administrator retained three of the four offices and Assistant Administrators. The Office of Public Affairs was removed as a functional component and was placed with the staff offices reporting directly to the Administrator and his Deputy.

The Office of the Administrator continued to be supported by the General Counsel, an Associate Administrator for Planning and the Office of Management Development. The Aerospace Safety Advisory Panel, the Personnel Management Review Committee, the Executive Secretariat, and the liaisons with professional societies remained unchanged. Field centers continued to report to the program Associate Administrators, but a reorganization split the Office of Space Sciences and Applications into two program offices, Space Science and Applications. The Office of Space Science retained the responsibility for managing the Goddard Space Flight Center, Jet Propulsion Laboratory, and the Wallops Station. Also, the Office of Advanced Research and Technology was renamed and organized as the Office of Aeronautics and Space Technology.

Dr. James C. Fletcher
January 14, 1972

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



January 14, 1972

1973–1974

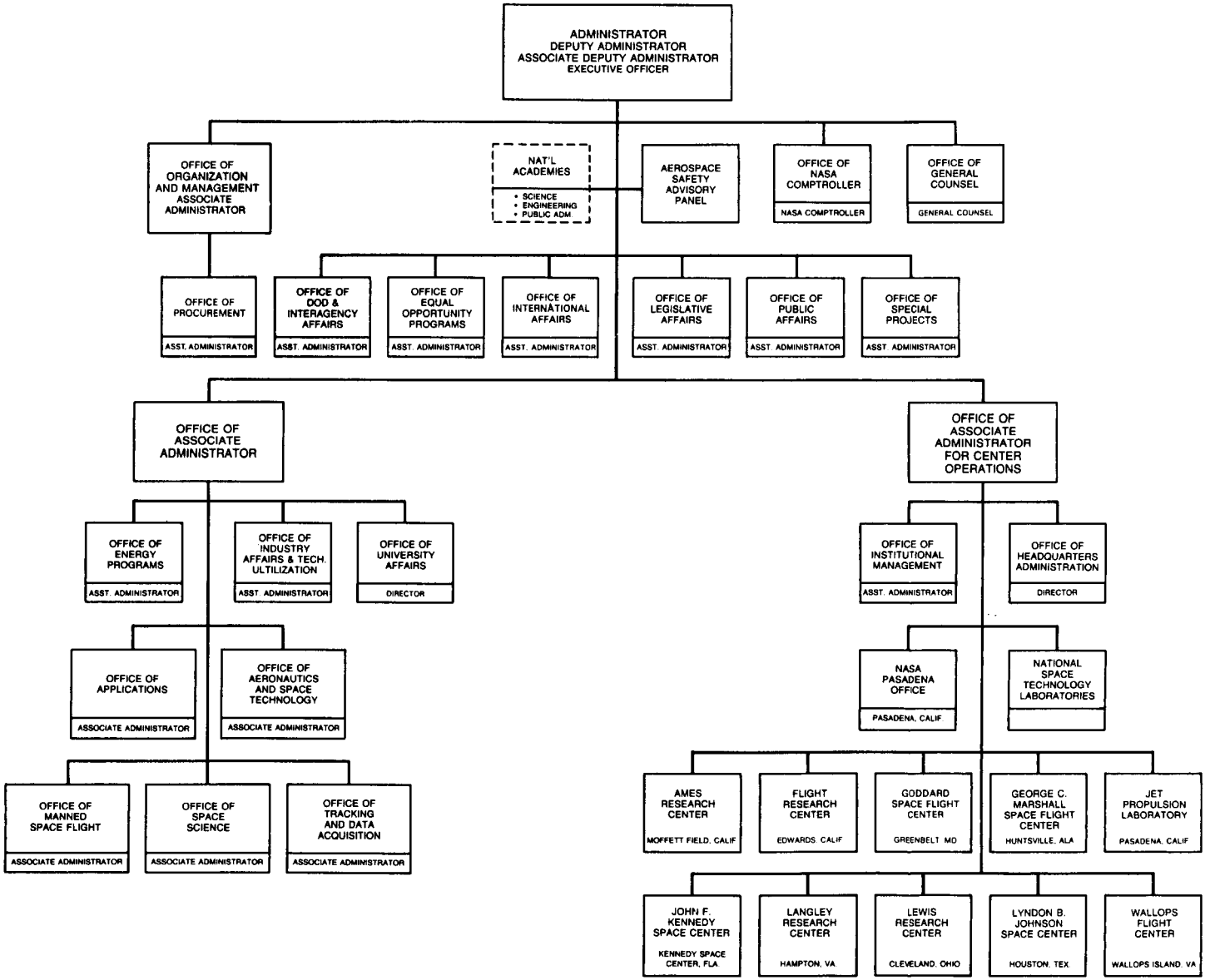
A major reorganization of the Agency was implemented during the Spring of 1974. Several important changes were made in the way NASA managed its field centers and program offices. In addition, many of the functional offices, once under an Associate Administrator for Organization and Management or the Associate Deputy Administrator, were relocated as staff offices to the Administrator. This change in the placement of the functional offices reduced the Office of Organization and Management's activities and placed it in a staff role to the Administrator with direct line responsibility for only the Office of Procurement. The budgeting and financial management activities of the Office of Administration were placed in the newly created Office of NASA Comptroller. An office of planning or policy analysis no longer existed; nor did the staff offices of Management Development or the Personnel Management Review Committee. The General Counsel and the Office of Public Affairs continued as staff offices and were joined by the Offices of DOD and Interagency Affairs, Equal Opportunity Programs, International Affairs, and Special Projects.

The two most significant organizational changes were the alignment of all the program offices under the Office of the Associate Administrator and all of the field centers under an Associate Administrator for Center Operations. No longer did the field centers report to the program Associate Administrators for both their institutional and program management direction and control. The new Associate Administrator for Center Operations included an Office of Institutional Management to provide an Agency-wide institutional management focus. Included in this new organization was a Director of Headquarters Administration.

With this reorganization, program Associate Administrators lost their direct reporting line to the Office of the Administrator. All the program offices now reported to the Office of the Associate Administrator which included a new Energy Programs Office, the Office of Industry Affairs and Technology Utilization and the Office of University Affairs. This reorganization left nine staff offices, and a large program, and an institutional management office reporting to the Administrator. The Associate Deputy Administrator was relocated into the Office of the Administrator. The Administrator continued his role with the Aerospace Safety Advisory Panel and the liaison relationships with the National Academies.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

July 22, 1974



1976–1977

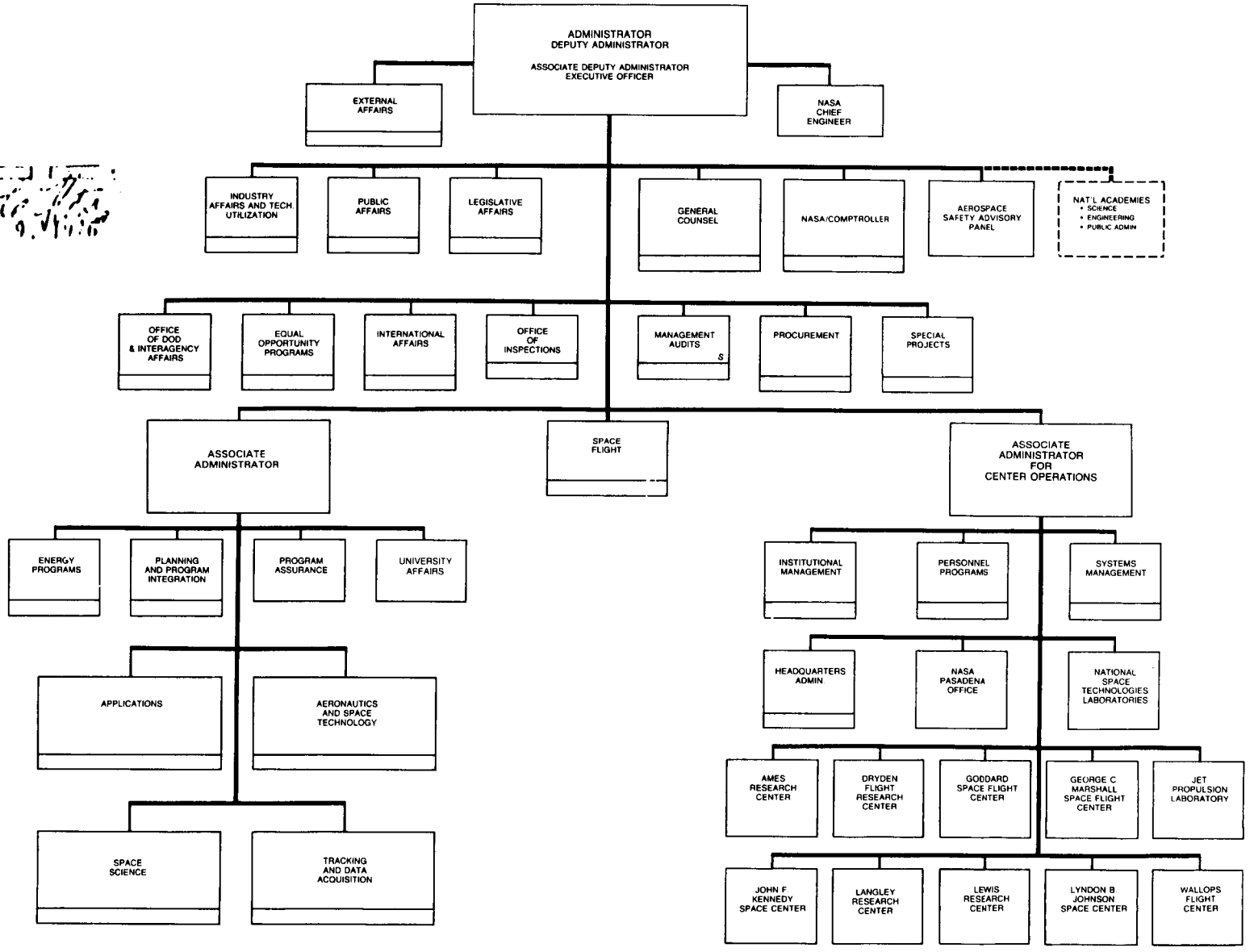
NASA continued to utilize Associate Administrators to manage the program offices and the field centers. However, with the initial plans for the development of a Space Shuttle accepted, the Agency reorganized the Manned Space Flight program and redefined its relationship in the organizational structure. Renamed the Office of Space Flight, it was removed from the Associate Administrator's office and reports directly to the Administrator. The responsibility for maintaining the space flight centers, however, remained with the Associate Administrator for Center Operations.

Several changes were also made in the type and number of staff offices reporting to the Administrator's office. An Office of External Affairs was created that included the old offices of Public Affairs and Industry Affairs and Technology Utilization, formally a functional office under the Associate Administrator. The Office of Legislative Affairs remained intact, but played a liaison role with the new Office of External Affairs. The offices of Inspections and Management Audits were added as staff offices and a new position was created for a Chief Engineer. The staff offices of the Comptroller, General Counsel, DOD and Interagency Affairs, Equal Opportunity Programs, International Affairs, and Special Projects continued. The Office of Organization and Management was abolished and the Office of Procurement previously under it is relocated as a separate staff office. The Aerospace Safety Advisory Panel and the National Academies' liaison roles remained.

Changes in the Associate Administrator office responsible for managing the program offices included the removal of the Industry Affairs and Technology Utilization Office and its placement in the new staff Office of External Affairs. An Office of Planning and Program Integration to review long-term plans for utilizing the Space Shuttle was added along with a Program Assurance group. The University program remained. The Associate Administrator for Center Operations continued to manage the field centers, including those primarily active in space flight. The Office of Institutional Management and Headquarters Administration remained and two offices were added, Personnel Programs and Systems Management.

Dr. James C. Fletcher
February 9, 1976

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



1978

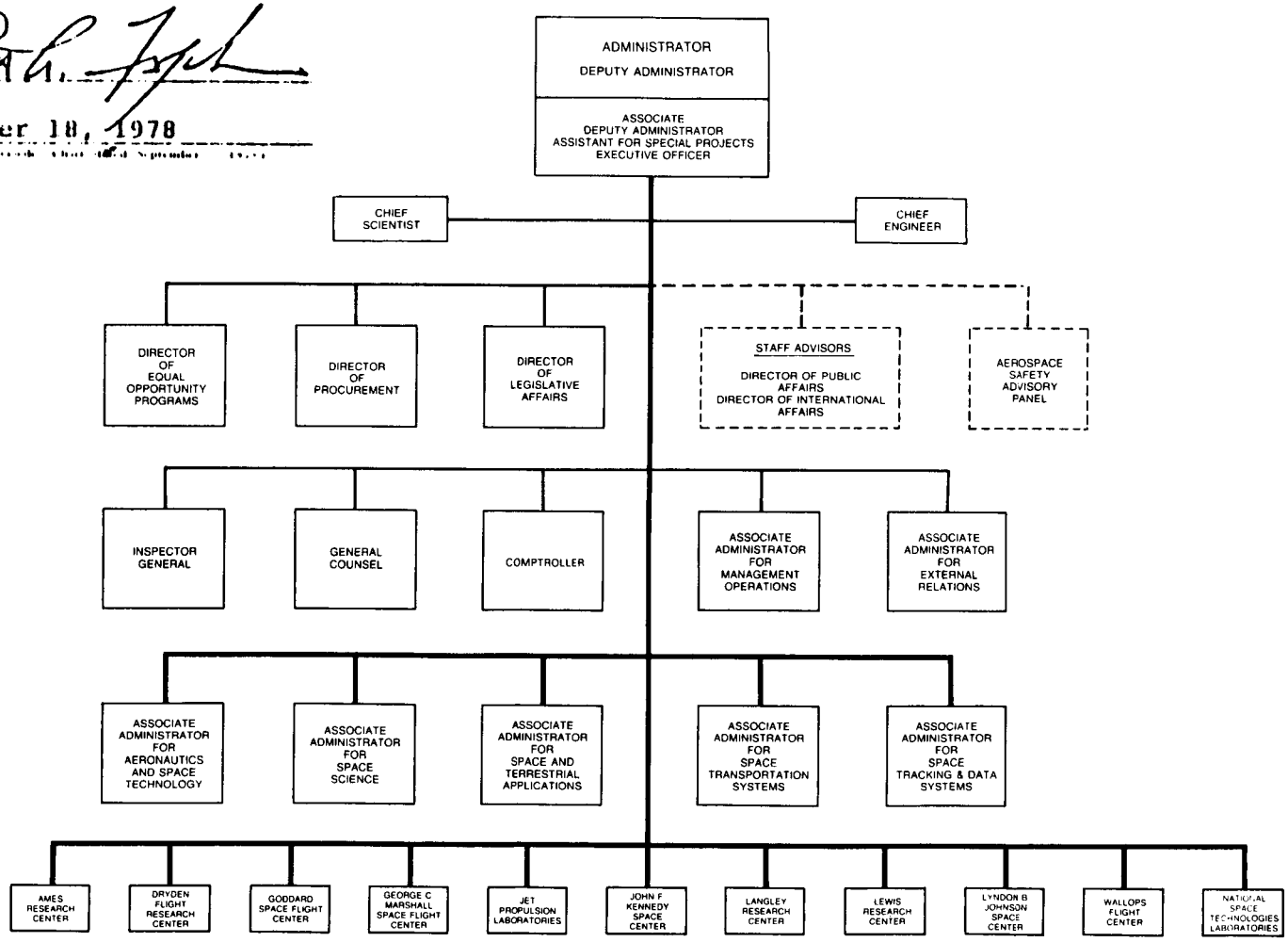
In 1978, the Agency underwent another reorganization that realigned the management responsibilities for the program offices and field centers. Instead of program offices responding to one Associate Administrator and the field centers through another Associate Administrator for Center Operations, both groups now reported directly to the Administrator. In addition, two program offices are renamed. The Office of Applications became the Office for Space and Terrestrial Applications. The Office of Space Flight was renamed the Office for Space Transportation Systems.

Changes in the staff structure of the Administrator's office were the addition of an Assistant for Special Projects located directly within the Administrator's office. A Chief Scientist position was added and the Offices of Public Affairs and International Affairs took on a redefined staff advisory role, along with the Aerospace Safety Advisory Panel. The liaison relationships with the National Academies were no longer represented in the NASA structure. Staff offices that remained were the newly named Office of External Relations headed by an Associate Administrator, Legislative Affairs, the General Counsel, Comptroller, Procurement, and Equal Opportunity Programs. Former staff offices that are removed are the Industry Affairs and Technology Utilization, DOD and Interagency Affairs, and the offices for Inspections and Management Audits. Two new staff offices were created, the Office of Inspector General mandated by Congress and an Associate Administrator for Management Operations.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

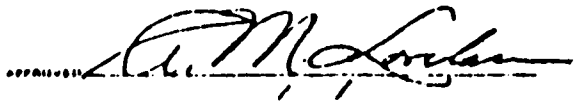
Dr. Robert A. Frosch
October 18, 1978

October 18, 1978



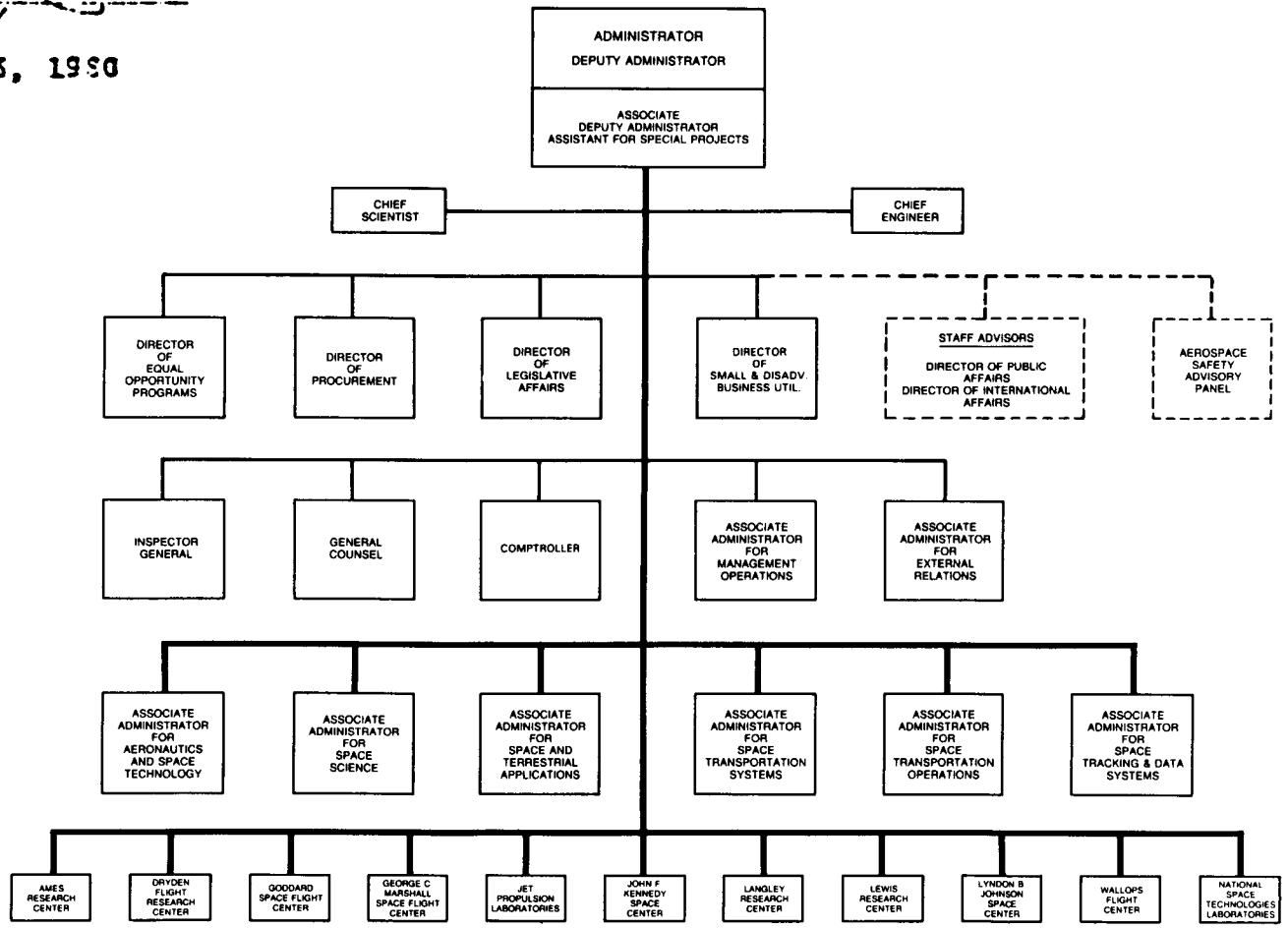
1980

Program offices and field centers continued to report directly to the Administrator. The structure of the staff offices remained the same with the exception of the addition of a Director for Small and Disadvantaged Business Utilization. The one major organizational change made was the division of the Office for Space Transportation Systems into an Office for Space Transportation Systems and an Office for Space Transportation Operations. This change divided responsibilities between Shuttle development and Shuttle operations. The Office for Space Transportation Systems focused on completing the Shuttle's production. The Office for Space Transportation Operations focuses on preparing for the Shuttle system once fully tested, scheduling flights, developing pricing policies and launch service agreements, and managing the Spacelab and expendable launch vehicle programs.



February 13, 1980

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



1981–1982

NASA underwent another reorganization that focused on the reporting responsibilities of the program offices and field installations. Once again field centers reported to those program offices for whom they perform the bulk of their work. Two field centers, Dryden Flight Research Center and the Wallops Flight Center, were renamed facilities reporting to, and managed by, the Ames Research Center and Goddard Space Flight Center respectively. Changes within Headquarters Program offices included the merging of the two Shuttle program offices into the Office for Space Flight and the combining of the Office for Space Science and the Office for Space and Terrestrial Applications into the Office for Space Science and Applications. The Office of Management Operations became the Office of Management.

The Associate Deputy Administrator was moved outside the Office of the Administrator to the staff office level. The number of staff offices remained the same but the titles of Directors for Equal Opportunity Programs, Procurement, and Legislative Affairs were changed to Assistant Administrator status. The last remaining functional responsibilities under the Comptroller's office, Facilities and Supply and Equipment, were placed within the Office of Management. The offices of the Chief Engineer and Chief Scientist also remained as staff positions to the Administrator's office.

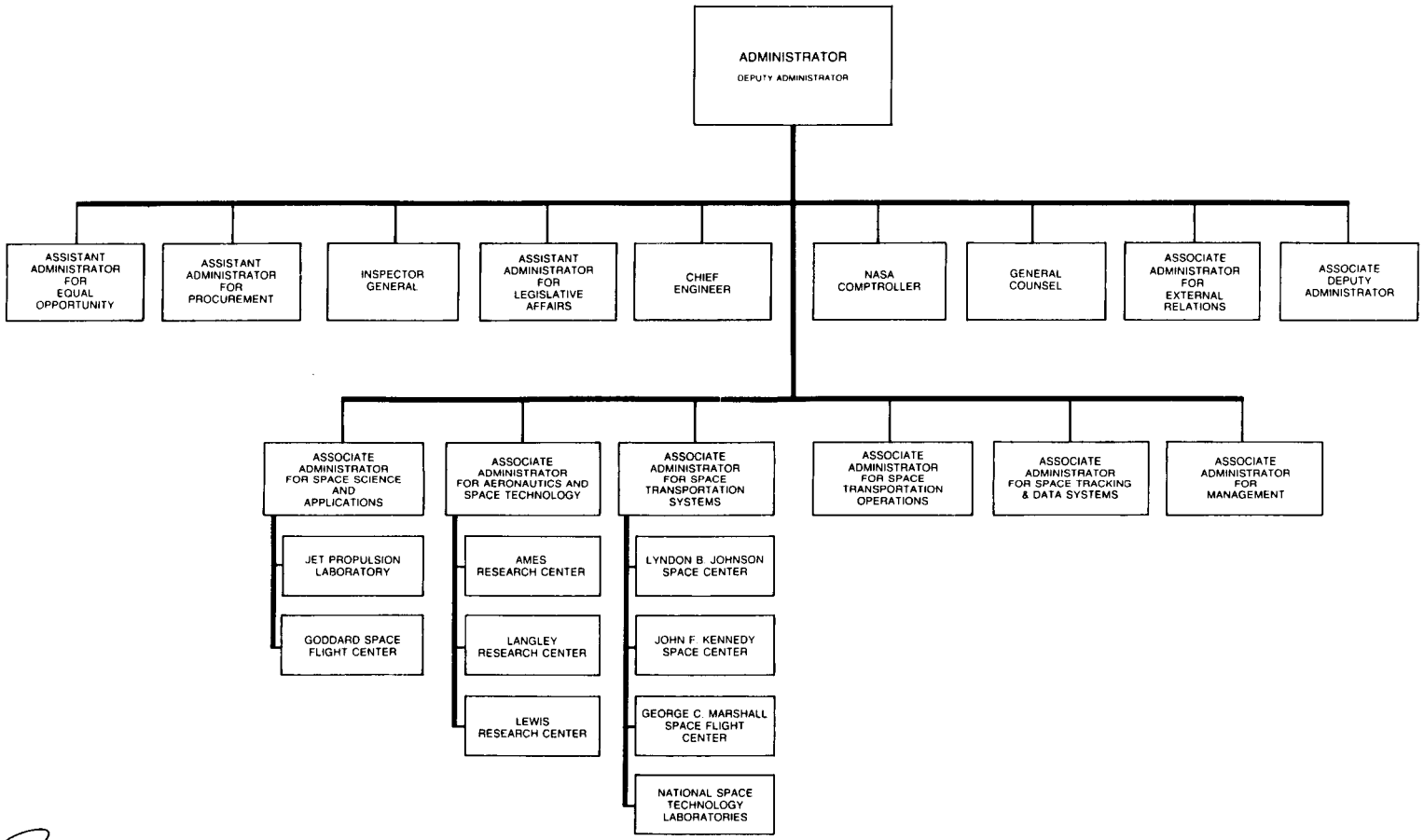
The objectives of this reorganization were the establishment of a clear distinction between line and staff management and the creation of a direct line relationship between the Administrator, program Associate Administrators, and the Center Directors for both program and institutional management. The Office of Management was established to act as a staff advisor to the Administrator and the program Associate Administrators on institutional matters and to be responsible for the institutional management of NASA Headquarters. Also, the Office of Management was responsible for providing advice to the Administrator on the construction of facilities, resources and program management budgets, manpower issues, and the long-range institutional impact of Agency budget decisions.

1983

The position of Associate Administrator for Policy was established to serve as policy advisor to the Administrator and Deputy Administrator and to participate in the continuing Agency involvement in the activities of the National Security Council Senior Interagency Group on Space. Although not reflected on the overall NASA organization chart, the Agency placed increased emphasis on improving productivity, exploring ways to commercialize the application of space technology, and ensuring appropriate space station advance planning.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

James M. Beggs
February 22, 1982

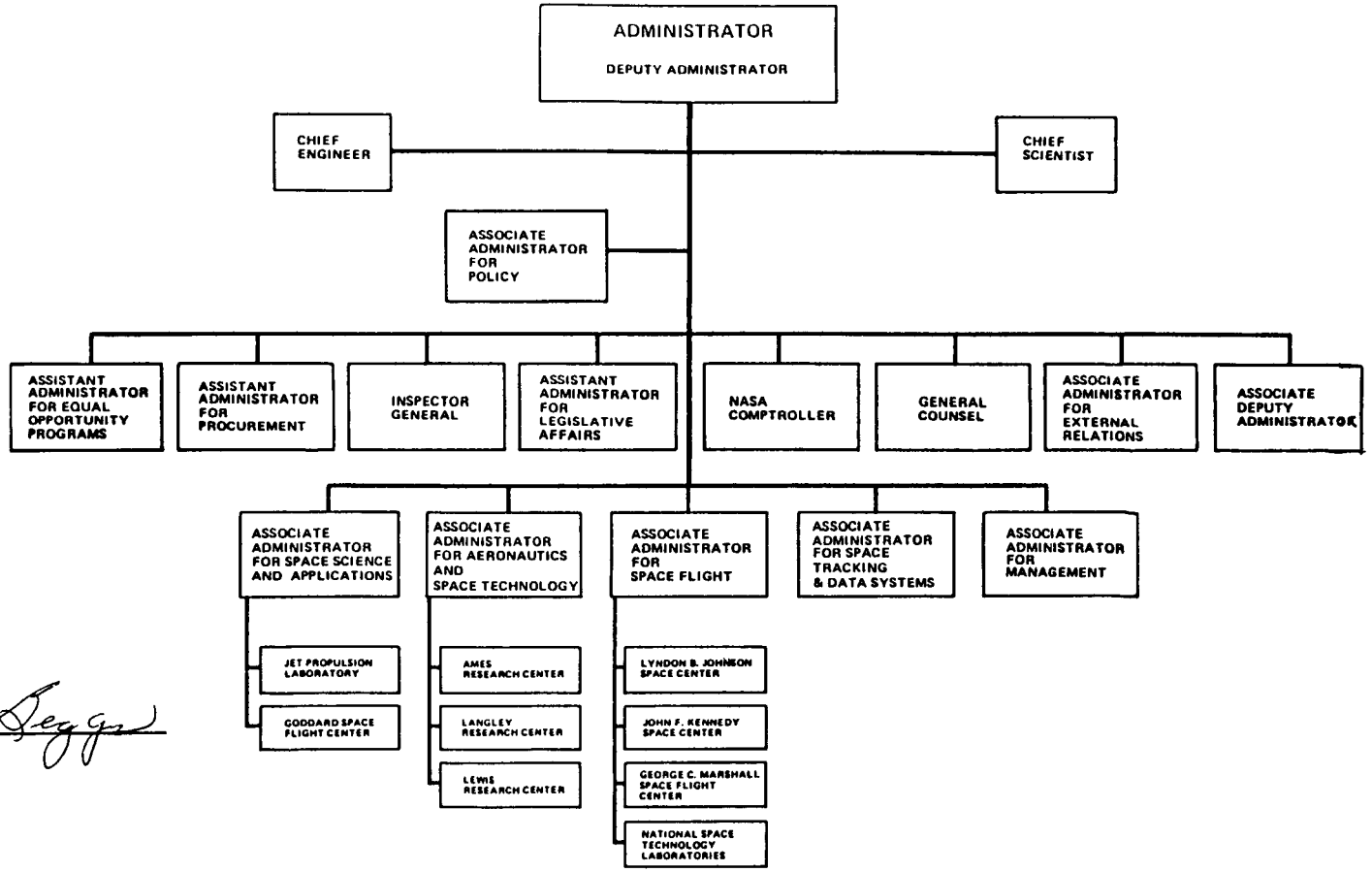


APPROVED James M. Beggs

DATE February 22, 1982

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

James M. Beggs
April 11, 1983



APPROVED James M Beggs

DATE 4/11/83